THE MEANING OF LIFE:

A Final Solution



Author: Bahram Eftekhari

به زبان انگلیسی اساد برام افخاری



ANSARIYAN PUBLICATIONS

P.H. Hor 187

22, Shohada Str. - Qum

Islamic Republic of Iran

Tel: 0098 251 7741744 Fax 7742647

Emeil: ansarian@noornet.het & Int_ansarian@yahob.com

www.ansariyan.org & www.ansariyan.net



THE MEANING OF LIFE:

A Final Solution

Evaluating Circumstantial Evidence Supporting Theism

A Unitarian Primer Based on Islam, Christianity, Judaism and Zoroastrianism

By Bahram Eftekhari



IN THE NAME OF ALLAH,
THE ALL-BENEFICENT, THE ALL-MERCIFUL

افتخاری، بهرام، ۱۳۲۱ -

Eftekhari, Bahram, 1331-.

The Meaning of Life: A Final Solution/ by Bahram Eftekhari.-Qum: Ansariyan, 2010.

296P.

ISBN: 978-964-219-128-4

فهرستنویسی بر اساس اطلاعات فیپا.

انگلیسی. (میثیٹک آو لایف...).

۱. زندگی. ۲. معنی شناسی (فلسفه). ۳. زندگی -- جنبه های مذهبی. الف. عنوان.

117/A

شماره کتابشناسی ملی: ۲۰۹۲۲۹۹

٩م١٧ألف/BD٤٣١

1741

معنای زندگی

The Meaning of Life: A Final Solution

Author: Bahram Eftekhari

Publisher: Ansariyan Publications

First Edition 2010 - 1389 - 1431

Press: Quds

Quantity: 2000

Number of Pages: 296

Size: 162X229 mm

ISBN: 978-964-219-128-4

ALL RIGHTS RECORDED AND RESERVED FOR THE PUBLISHER



ANSARIYAN PUBLICATIONS

P.O. Box 187 22 Shohada St., Qum Islamic Republic of Iran

Tel: 0098 251 7741744 Fax: 7742647

Email: ansarian@noornet.net & Int_ansarian@yahoo.com www.ansariyan.net & www.ansariyan.org

CONTENTS

CHAPTER 1: FINAL SOLUTION	y
Introduction1	1
The Law of Indeterminacy 1	2
Absolute Truth1	3
Evolution 1	4
Big Bang1	6
Quantum Theory	17
Cosmic fine tuning	18
Terrestrial fine tuning	19
Pascal's Wager1	19
Bible	20
Koran	22
Spiritual Awareness	22
CHAPTER 2: THE ORIGINAL CONTROVERSY	23
Decision Mechanism	23
The Philosophy of Atheism	25
A Reflection on Absolutes	28
Political Correctness	
Religious Intolerance	32
Effects of the Outcome	33
Unification of Religions	34
Instruments for the Search	34
Science as a source of Absolutes	35
Philosophy	37
Defining the Objective	39
CHAPTER 3: A MEASURED APPROACH	42
Physical Assumptions	42
Dubious Postulates	
Monotheistic Prophets	45
Objective	47
Candidates	47
Hinduism	47
Jainism	
Buddhism	52
Taoism and Shintoism	
Zoroastrianism	
Short Summary	56

	The Premise	. 57
	CHAPTER 4: A RATIONAL APPRAISAL: COSMOLOGY	60
	Introduction	60
	Time of Creation	62
	Period 1: Creation of Light	63
	Period 2: Creation of the Firmament	64
	The Mundane Interpretation	65
	The Alternative Interpretation	66
	Further on the accuracy of the Bible	69
	Summary	. 70
	Period 3: Creation of Earth, the seas, vegetation and trees	.71
	Period 4: Creation of the sun and moon and stars, the day and night, and the seasons	. 73
	Period 5. Creation of living creatures of the sea and birds	. 73
	Period 6. Creation of land animals and man	.74
	CHAPTER 5: A RATIONAL APPRAISAL: EARTH SCIENCES	. 80
	CHAPTER 6: A RATIONAL APPRAISAL: HISTORY	. 86
	Historical Events	. 86
	Interpretation of Dreams	. 90
	The Propensity for Deification	. 98
	CHAPTER 7: COSMIC FINE-TUNING	108
	Science versus Religion	108
	Multiverse Scenario1	110
:	Proposed Alternatives	112
	Anthropic Detractors	116
1	Brief Summary	120
•	Terrestrial Fine-Tuning 1	120
•	Table 2: Terrestrial Fine-tuning Parameters 1	120
	Table 3: Estimate of the Probability for Attaining the Necessary Parameters to Suppor	
	Life	
	CHAPTER 8: PASCAL'S WAGER	
	Decision Theory	
	'ascal's Matrix1	
	Table 4: Pascal's Decision Matrix	
	Gambling	
	pposition to Pascal's Wager	
	remise 1: The Decision Matrix	
P	remise 2: The Probability Assigned to God's Existence	140
P	remise 3: Rationality Requires Maximizing Expected Utility	143
R	ejection of Pascal's Wager1	145
C	HAPTER 9: THE EXPOUNDED THEORY1	148
TI	neary Outline	148

Brief1	
Nature of God1	49
Nature of Man1	51
Theist/Atheist Dichotomy1	51
Human Perspective1	.54
The Vastness of the Universe1	55
The Primal Covenant 1	58
Summary 1	60
Status of Humanity 1	62
Dogma in Refuting the Next World1	1 63
Science in Evaluating the Theory	164
Politics of Faith1	167
Criteria for Hell1	169
Spiritual Awareness	171
A Breach of Evolution	172
Cut Off Point	173
A Matter of Perspective	174
A Partner in Wealth	175
Time Component of Man	175
Misfortunes	
Hedonistic Imperative	180
Concept of Falsehood	
The Soul (Summary)	
It's All Our Fault No Matter What	
Compulsion in Religion	
Political Aspects	
Cultural Influence	
Severity of Hell	
Summary	
Stages of faith	
CHAPTER 10: THEORETICAL DEDUCTIONS	
Into the fray	
Instruments of the trial	
Trial Handicaps	
Self imposed limits	
Spiritual awareness	
Human tyranny of animals	
Source of ethics	
List of Explanations (Summary)	
A summary of maxims from the Koran	
CHAPTER 11: PERSPECTIVE OF BELIEF	
UIMI IEA II. I EAGI EU IIVE UF DELIEF ************************************	~ 13

Weltanschauung	. 213
Summary Issues	, 215
The Philosophy of Jihad	. 218
The Basis for Self-restraint	. 220
Love and Marriage	. 222
Family and Friends	. 224
Conventional Wisdom	. 225
Health food diet	. 228
Levels of Health	. 231
Further on the wholefood diet	. 233
CHAPTER 12: CHRISTIANITY	. 235
Background	. 235
The status of Jesus	. 236
The Council of Nicaea	
More Questions on the Controversy	. 242
Paul's Message	
Historical Accuracy	
Truthfulness of the Gospels	. 253
The Koran on the Christians	
Cultural Impediments	
CHAPTER 13: JUDAISM	. 259
Fundamentals	
General Religious Conceit	
Jewish perspective	
Palestine	
Holocaust background	
Hitler	
Historical Influence	
APPENDIX 1: FURTHER ON THE INTERPRETATION OF DREAMS	
APPENDIX 2: MORE ON THE SPEED OF LIGHT	
APPENDIX 3: DID HITLER WANT WAR?	
Hitchens on WW2	
THEOLOG ON WY 4	,, <i>47</i> 3

CHAPTER 1 FINAL SOLUTION

Science can never disprove the existence of God, and religion can never prove it. A resolution for this timeless controversy is presented here free of the usual dogma and cultural bias to facilitate evaluation of its viability. Major life decisions based on emotion instead of evidence are no longer excusable.

Any claim to explain the meaning of life is a profound assertion; a final solution even more so, but the final solution presented here also happens to be the first; the same that existed throughout history and outlasted every other. No other theory on any subject has remained basically intact from the dawn of civilization till now. It is the same theory presented by Zarathustra (roughly six millennia ago), Abraham (five), Moses (four), Jesus (two), and Mohammad (one).

The third millennium also had great philosophers, Aristotle, Plato, Buddha, and Confucius, but their theories didn't explain the meaning of life (nor claimed to). Practically every other theory, by the greatest thinkers through the ages, has ended up as a philosophical relic in the museum of history.

Only Science has the credibility to present a viable alternative, but though it explains most things in the Universe, it has conspicuously failed to do so and is unlikely to in the future. Science is inherently incapable of describing absolute values because that requires absolute knowledge. Science is based on knowledge obtained in a closed system that is tentatively extrapolated outside the field of observation. Most of the time it accurately describes the real world, but for absolute knowledge on an infinite scale, it is inherently unqualified.

Even if all the laws of physics were discovered, it would still not explain why we are here and what meaning there is to life. The only alternative is the secular explanation that there is no meaning to life and it's all an accident of Nature; but many eminent scientists, the world's most rational thinkers, as well as the vast majority of humanity still have strong religious or spiritual convictions.

Humanity, despite its relentless obsession with the supernatural, is not collectively delusional or paranoid. The phenomenon shows irrational behaviour from the most rational species. Though totally inexplicable by science, it is in perfect accord with our theory.

Another hypothetical scenario is that a new philosophy or religion will turn up in the future to explain the meaning of life. If that religion doesn't have a god, then it can't claim to be absolute and its meaning of life will be a human fabrication. If it does have a god, it is unlikely that its god would have ignored all humanity till then. Also one can fairly assume there aren't numerous gods out there each with a different and conflicting explanation to the meaning of life.

No domain of intellectual thought is likely to replace Science, thus the first theory is set to remain the final also.

INTRODUCTION

Absolute truths are independent of human thought and apply throughout the Universe. The most fundamental absolute truth, which more than other any single factor determines the fate of humanity and the Universe, is the outcome to the controversy on the existence of God. The result affects every aspect of human life and every value in the Universe.

Whether we believe in God or not has no effect on His existence; best to rely on evidence even though circumstantial. In determining whether God exists or not, a rational approach free of emotion, as intelligent computers have, would initially allocate equal probability either way then adjust this as evidence for or against is presented.

Though quite straightforward, humans aren't so good at this; we tend to base our decision on emotion, accept notions supporting it, discount those opposing it, and believe all along we are being rational. The resistance to relinquish emotion in such a fundamentally important issue and the degree of indifference to circumstantial evidence available is truly remarkable.

Humans, despite their immense rational capability, are also the most emotional species; by some estimates ninety percent of all human decisions are based on emotion, whereas animals rarely allow emotion to compromise their rationality or decisions.

Humans have the highest capacity for emotion even though it doesn't play a major role in evolution; another example of the profound disparity between humans and animals inconsistent with genetic similarity. One must allow for this vast capacity for emotional sway when evaluating emotionally charged issues such as whether God exists.¹

Direct evidence supporting atheism is notable by its total absence. Atheism is based on flaws in the Scriptures, suffering caused by religious strife, cultural bias, and plenty of gut emotion, but not on any intrinsic fundamental principles. The strength of atheist conviction is incompatible with the profound lack of evidence, demonstrating a strong emotional component in their conviction. Atheism is itself a faith based on little backing evidence.

¹ http://www.usatoday.com/tech/science/discoveries/2006-08-06-brain-study_x.htm

Direct evidence for the existence of God does not exist either, but according to the theory derived from the Scriptures, direct evidence must not exist. (The Koran, Bible, and Torah, are referred to here as the Scriptures.)

It is truly astonishing how this absolute principle of fundamental importance, a cornerstone of monotheistic theory, is so little appreciated or generally understood, including adherents of the Scriptures, who persist in trying to prove the existence of God, and atheists, who consider the lack of proof or direct evidence as a flaw.

Though direct evidence is not available, substantial circumstantial evidence rationally shows that the existence of God has a substantial probability. Such evidence is presented here together with a coherent framework for the theory. The probability for viability is based on the circumstantial evidence available compiled here and the degree of coherence imparts cogency.

As specified by the fundamental principle of Indeterminacy, conclusive solution to man's greatest enigma is impossible by a direct approach; the only alternative is an indirect approach, in which the probabilities for each alternative are separately analysed and estimated:

- 1) Rational evaluation of the probability of theism.
- 2) Rational evaluation of the probability of atheism.

The sum of their probabilities is one.

The Law of Indeterminacy

If God does not exist, there is nothing to prevent mankind from finding this out, but if God does exist, conclusive proof has been deliberately withheld. This critical intrinsic condition is derived from the Scriptures. If definite proof for the existence of God existed, faith would become worthless, whereas its value is infinite, due to its infinite reward. No other value in the Universe can even claim to be infinite except God (disregarding abstract numbers divided by zero). Everything else in the Universe is finite.

The Law of Indeterminacy is based on the precept that the reward for faith is infinite. Thus the greatest value in the universe is faith, but if the existence of God could be proven, this infinite value for faith would abruptly become zero. Infinite reward imposes the condition that the existence of God must not be obvious; otherwise acceptance of faith would have the same merit as acceptance of physical laws.

If God had intended to present incontrovertible proof, we would have received it by now in no uncertain terms. The reason we haven't could be that someone is preventing it. The lack of conclusive proof either way is significant. If God does not exist, scientific proof to show this should become available sooner or later, because no one is actively withholding the evidence. The Law of Indeterminacy applies only if God does exist. If no one is preventing us from acquiring this information, we should be able to get hold of it, but this theory predicts this will never happen in this world. Atheism doesn't say why this is impossible and remains frustrated by its elusiveness.

The absolute condition of indeterminacy is a cornerstone of theism. If atheism had stipulated that absolute proof for the non-existence of God must not become available, then indeterminacy would increase its validity, but as it happens the opposite applies. To support atheism, the non-existence of God should be provable; it's not. In support of theism, neither the existence nor non-existence of God must be provable; neither is.

Even before evaluation of circumstantial evidence, coherence of the theory shifts the probability towards theism. Paradoxically, atheists consider indeterminacy as evidence against theism, even though it is a pillar of theistic philosophy.

Absolute Truth

A specific theory for absolute truth is presented here together with circumstantial evidence supporting it. Its viability can be evaluated and compared to the viability of the theory of atheism as presented elsewhere by Tobin, Dawkins, Hitchens, et al.

The theory is based on the premise that God created the Universe and has perfect knowledge of everything in it, from every spin of subatomic particles to galaxy clusters, from time zero to infinity. For God, nothing is unknown, no mystery exists; everything totally obeys the laws of physics. Everything in the Universe is absolutely, totally, and utterly predictable it its entirety for God.

This state of perfect predictability could become extremely tedious, though this is a purely human perspective. In a break to this state of utter, utter predictability, God introduced a radical new dimension: free will, the extraordinary entity that can override environmental and genetic conditioning.

There may be others reasons that justify God's actions about which we know nothing, just as most of human activity is totally incomprehensible to ants. The vast energy and resources expended on recreation, humanity's greatest industry, is a great incomprehensible mystery for them.

A necessary accessory to free will is another extraordinary entity, deep consciousness; also scientifically inexplicable, referred to by scientists as the last frontier. Other extraordinary entities that connect deep consciousness and free will to the real world are conscience and morality, a game field charged by the polar forces of good and evil. For all we know, these are all arbitrary entities created for the purpose.

Only one life form we know is engaged in this trial, suitably primed by deep consciousness for understanding the rules of the game, free will for the freedom to choose, and conscience to charge the players in a polar field of good and evil.

Arbitrary rules have been ordained: religious laws. A suitable space of time is granted; after its ending in death, the individual is resurrected and held accountable. (Note the arbitrary nature of religious rules; emphasis is on abiding by the rules, not their universal unalterable values.)

If no reward or punishment were involved, the game would be devoid of motivation, perhaps a bit meaningless and inconsequential. It could even acquire a frivolous quality incompatible with the seriousness of the endeavour; the Universe is its stage. The premise would be flawed and its coherence damaged.

The scale of reward and punishment, time adjusted, must diminish to insignificance any value that can apply in this world and must also be commensurate with their immense distance beyond the vast unknown and unchartable chasm of death.

The infinite reward and punishment demanded by coherence is considered by atheists as a fault in the theory. The test would be flawed if intelligence, physical strength or skills beyond the capability of the individual were required. Absence of such flaws increases coherence.

The extremely low probability that the unique entities of free will, deep consciousness, conscience, and spiritual awareness all developed by chance in only one out of tens of millions of species while no other species shows the slightest inkling for any of these, substantially increases the probability of deliberate design and decreases the probability of random evolution.

Evolution

This theory gives a coherent explanation for the extraordinary qualities of free will, morality, deep consciousness, and the reason for their uniqueness to mankind. All these are components of yet another extraordinarily unique entity: spirituality.

The atheist riposte is that these are all accidents of Nature, but this explanation is not viable because it violates a basic law of evolution: beneficial traits are distributed to as many species as possible. Why are these qualities unique to humans? The probability that all four extraordinary attributes were bestowed solely by chance on humans and held back from every other species is remote. Evolution just doesn't work that way.

If these were chance products of evolution, other revealing signs must inevitably be observable:

- Random distribution of these traits in various degrees of development among various human races (suggesting a cultural origin).
- Varying stages of development of these among other species (suggesting a genetic origin).
- An explanation why these have developed and what their evolutionary benefits are for the species.

None apply.

Instead of random distribution with varying degrees of development, we see an inexplicably uniform distribution of spirituality among humans, from aborigines in Borneo to bankers in Zurich; all have the same awareness of spirituality and the supernatural. All humans from prehistory appear to have it in full; all other life forms none.

What are the evolutionary benefits? Atheists say religion has brought nothing but suffering and damage. Not only is there little evolutionary benefit from religion but plenty of evidence for its damage. Inexplicable human obsession with the supernatural, God, religion, worship, death, and the afterlife transcends era or geography. There is little sign of it decreasing despite its damaging effect. Even when suppressed under Communism for example, it rebounded with vigour. When organized religion loses its credibility, instead of a decline in spirituality, it rebounds in other forms: superstition, paganism, and witchcraft, which amazingly are the least rational aspects of spirituality, developing alongside a general increase in rationality in the scientific age.

- In clear violation of natural evolutionary development, no other species appears to show the slightest awareness.
- No other important trait is unique to just one species.
- Every new research on animals demonstrates how remarkably similar they are to humans in practically every way.

Chimpanzees have much better (short term) memory than humans. Crows with tiny bird brains are more intelligent than man's closest species, the great apes. The most intelligent species are not our closest genetic relatives, but crows, dolphins, Giant Pacific Octopi, and elephants. Some animal brains are six times greater than humans. We share 50% of DNA with worms, bananas, yeast and 40% with lettuce.

The distinction between animals and humans in areas previously considered unique to humans are rapidly disappearing: culture, use of tools, emotions, deception, empathy, personality, mind reading; animals have them all too, but totally at odds with evolution, spirituality remains profoundly unique to humans. Spirituality not only doesn't have any evolutionary advantage, but differences over it have been a major drain of precious human resources and a major cause of destruction of life and property. Humanity has developed despite it, not because of it.

If it imparts peace of mind, animals need it more. Their lives are much more stressful; if it does have any benefit, animals should have developed it also. If it has no evolutionary benefit and is a major cause of damage, then why have humans developed it so completely? The occurrence by accident of such a damaging entity in the single most successful species is very unlikely (assuming overrunning the planet, destroying the environment, and damaging the world's habitat for 99% of species can be called successful). These increase the theory's

probability and viability. Furthermore the degree of human spirituality has barely changed from its Neolithic cave dwelling past to its sophisticated present; which is in perfect accord with our theory but inexplicable by science.

Big Bang

Historically a difficult question for theists has been: who is greater, God or the Universe? How can the universe be anything but infinite? Wherever its boundary, more space lay beyond. As creator of the Universe, God must be greater, but how can God be greater than infinity? This presented a profound predicament.

The concept of the infinity of God was intensely discussed even in the infancy of Christianity. Bishops quarrelled furiously over it at the Council of Nicaea in 325 AD, the first official gathering of Christian clerics. Opponents of the divinity of Jesus, led by Arius, demanded to know how an infinite entity is of the essence indivisible from or joined to a finite human body. In the acrimonious dispute, Arius broke the nose of St. Nicholas (later known as Santa Claus). The outcome was the banishment of Arius and all claims of the non-divinity of Jesus were thereafter banned by Imperial decree.

Another troubling question: could God outlast Time? Who came first, Time or God? Newtonian Space rivalled God in greatness and Newtonian Time rivalled God in primality and longevity, (though Newton himself was always the most pious believer).

All became light after the big bang; Space and Time were created a mere 13.7 billion or so years ago. Einstein's Space and Time no longer rival God as they did in Newtonian form; both are mere recent entities of Creation. The degree of compatibility of the most recent scientific theories with theism is astonishing.

Created entities are fully compatible with the existence of a Creator, as opposed to Newtonian Space and Time, intractably infinite with no beginning and no end in an uneasy independence of God.

Relativity went even further: Time and Space are both readily pliable. Space is bent by mass, and time is slowed by movement. Far from Newtonian supremacy, these created entities can be easily manipulated at will by humans, let alone by their Creator.

Astonishingly, advances in science are making basic precepts of theism more viable. The increasing compatibility is truly significant. In all probability and following historical precedence, the opposite should have occurred.

Practically every theory from the distant past and all religions not based on the Scriptures now look quaint and untenable, while growing compatibility of the Scriptures with science raises their viability and reduces the probability of their being a series of lucky Bronze Age guesses. At least it shows they deserve further serious consideration, which atheists refuse, further demonstrating their preference to subordinate rationality to emotions in the Age of Reason. Their absolute conviction that *they* are the rational party and theists are the dogmatic lot is ironic, amusing, and sad.

Quantum Theory

The most verified theory in science affects our view of reality more than any other, even more than the theory of Relativity. Quantum Electrodynamics is generally regarded as the most verified theory in the history of science, physically verified to 12 decimal places: and some parts of it have been verified to a mind boggling 20 decimal places.

An incredible derivation from this theory is the requirement of an observer for reality to exist. Instead of shaking the foundation of theism, the most proven theory in science suggests that reality does not exist unless observed by an intelligent being. A reasonable assumption is that reality has existed during the life of the Universe. It's not too unreasonable to say someone must have been observing it during that time; a further viable theory is that this someone is God.

A fiercely held secular conviction is that humanity is an infinitesimally small entity of infinite irrelevance in the vast scheme of the Universe. The theistic position is the opposite: spirituality and human thought play an important role in the Universe, the stage for the raging battles between good and evil.

Atheists consider this totally preposterous and indescribably ludicrous. They are also infinitely certain of their view, even though they don't have any evidence to disprove it. Again the incompatibility of the strength of their conviction with the dearth of evidence to support it demonstrates dogma. How ironic that they become culpable of the exact fault they accuse theists of. For example, they should now reflect on the unbelievable and astounding claim of Quantum Theory that human observation of the Universe has affected its fate. According to Profs Lawrence Krauss of Case Western Reserve University in Cleveland, and James Dent of Vanderbilt University, "by observing dark energy in 1998 mankind may have determined that the cosmos is in a state where it was more likely to end." These secular physicists believe that the actual act of human observation has sealed the fate of the Universe.

This is not an emotional opinion, but a scientific deduction from the Quantum Theory, which is astoundingly compatible with theistic theory and refutes the atheistic perspective of man's insignificant role in the Universe. The trend of outlandish theistic claims becoming highly compatibility with modern science is truly amazing, presenting further cogency. (Another outlandish theistic claim is everlasting life. According to Profs José Senovilla, Marc Mars, and Raül Vera of the University of the Basque Country Bilbao, and University of Salamanca Spain, time itself is slowing down and will come to a halt in a mere billion years).

see: http://cornea.berkeley.edu/pubs/158.pdf

² http://www.slac.stanford.edu/econf/C0306234/papers/bender.pdf

indifference is remarkable; another example of logic supporting theism countered by illogical emotional resistance or indifference. Dawkins, a self appointed high priest of atheism, says acceptance of the principle in Pascal's Wager is cowardly. He doesn't say illogical or irrational. Note the emotional component coming from a famous scientist discussing a mathematical issue.

Bible

The Bible contains many flaws, but it also contains a considerable amount of viable claims, and has played a historical role as a major source of human morality, culture, and wisdom. Remember the Bible is not intended to prove the existence of God. It does not claim to do so nor does it even claim to be the word of God. It is mostly historical narrative written by numerous unknown authors.

Much of its faults can be attributed to changes made later, which does not detract from the original. The Dead Sea Scrolls demonstrate officially condoned fudging, even though there can be little doubt of the piety of its scribes (fanatically religious Essenes who relinquished worldly values and lived as strict ascetics). This sort of alteration was normal practice and not considered sacrilege (ends justify the means for a good cause).

When a random sample shows deliberate alteration, the chances are the majority has them also. Respect for principles of accuracy normal today was not appreciated in ancient times. The portrayal of facts exactly as they happened had low priority; portraying the author and the home side in good light while making an entertaining yarn had higher priority.

Herodotus and Xenophon are considered fathers of history, even though much of their accounts are exaggerated or fabrications. Their Greek compatriots were invariably faultless heroes. Every single prediction made by the Oracle at Delphi invariably came true to every last improbable detail. Xenophon unfailingly predicted every event with amazing accuracy using his great expertise in examining the bowels of sacrificial animals (this important and pervading science was eventually banned by Christians after the conversion of Rome).

In describing the battle of Salamis, Herodotus mentions matter of factly he had it on good authority that one of the Greek warriors was actually the great grandson of Apollo.

The battle of Salamis probably didn't take place as described. Herodotus says the Persian navy was hit by a storm. This could have been the sole cause of its damage, but it was too great an opportunity to pass and not embellish the story. What a waste to give the glory of victory to a storm.

The English navy managed to sink only one of the 200 ships of the Spanish Armada. Nearly all the damage was inflicted by a storm, which prevented it landing in England or Holland as planned, and forced the Armada to circumnavigate Scotland. The storm damaged many ships and about another 50

ships were destroyed by a second storm off the coast of Ireland on the way back. Most of the soldiers and sailors died or were incapacitated by hunger or dysentery.

For centuries the English believed (some still do) that the Armada was destroyed by Drake, but only after coolly finishing a game of bowls. (Most Britons still don't know that his main occupation was high seas piracy).

In contrast to their numerous obvious fabrications in ancient Greek history, all of which is believed as fact in the West, the account of Creation in Genesis with slight modification conforms astonishingly well with the big bang theory, yet is generally regarded as absurd fiction.

The probability that it was all a bunch of lucky guesses is just too remote. The account is far too counter intuitive for its Bronze Age scribes to have conjured up. The degree of compatibility with modern evidence presents compelling indication that these were not fabricated.

Some may say the description of Creation in the Avesta, written many centuries before Genesis, also emphasizes the role of light in the first stage of Creation but rather than plagiarism, it reinforces the concept that these books were inspired by the same source.

The power of the Sermon on the Mount cannot be explained by self interest motives of false prophets. A pattern is discernable that most of them acted inexplicably against personal interests, recklessly risking their lives for philosophical abstractions, totally out of character. In contrast, Buddha's objective was personal contentment. He never opposed any established power structure and was never in any personal danger.

A pattern can be discerned where prophets risked their welfare and lives for the sake of abstract philosophies. Zarathustra, Abraham, Moses, Jesus, and Mohammad confronted monoliths of established power. They defied lethal danger with little chance of success, all for the sake of the abstraction of monotheism. If false prophets, what was their motivation?

A significant pattern emerges that none of them showed previous signs of rebelliousness or insanity. They all led peaceful law abiding lives. Their sudden revolutionary turn well past their youth is uncharacteristic, discontinuous, and inexplicable; but fits perfectly with an external calling.

Though many contradictions exist in the Bible, it is of considerable significance that the early editors knew about them, yet remarkably chose not to change them. If the New Testament was a scheme to start a new religion, the blatant contradictions could easily have been taken out. The fact that they weren't, suggests that the editors considered the enterprise a holy affair, and were reluctant to change anything out of respect for the basic precept.

The attitude appears to have been that all sincere reports on the life of Jesus must be treated with respect despite their inconsistencies, because they weren't sure which was the most accurate. Remember we are talking about obvious contradictions, like the lists of genealogies of Jesus which totally contradict one another, not obscure flaws which they were unaware of at the time, nor claims which were incompatible with scientific knowledge today.

Koran

The Koran too makes claims that could not have been known at the time. In light of present knowledge these were amazingly accurate and prescient. The probability that they were all lucky guesses is one in millions.

Despite the circumstantial evidence and very high probabilities involved, atheists refuse to consider the possibility of viability, demonstrating intense dogma; exactly what they accuse theists of.

About twenty claims from the Koran and Bible which have remarkable compatibility with scientific evidence are presented in Chapter 4. The cumulative probability is the factorial of all the fractions. If the claims were either/or situations, where a correct guess has a 50% probability, the cumulative probability for twenty correct guesses is one in a million. A more accurate estimate for each prediction is about ten percent, which gives a probability of one in a hundred million trillion. Ignoring the significance of such figures is illogical; a rational alien would incorporate them in its evaluation but many humans don't.

The eloquence of the prose is still of the highest order, and there is an extraordinary deficiency of flaws or contradictions.

Extreme cogency derives from the fact that these claims were written in the 7th Century, in an arid wilderness by a person who had neither education nor literacy. Arabic till then had been a strictly oral language; previous literature was nonexistent, except for a few shards of poetry. There is probably no other case in history where a work of literature developed from nothing, uninfluenced by anything before it, let alone the most influential book in the history of mankind.

Spiritual Awareness

Few people base their faith on Pascal's mathematical deductions or statistical probabilities derived from cosmic and terrestrial fine tuning. These are discussed here to assist the rational evaluation of the theistic premise.

Belief is based on an ethereal yet undeniable spiritual awareness, an inexplicable consciousness of the supernatural, a mysterious anomaly in an otherwise totally rational world.

The obsession with it by all humanity and its total absence in all other life forms is profoundly compatible with the theory of theism, and profoundly incompatible and inexplicable by evolution, especially considering our very close genetic similarity to animals.

CHAPTER 2 THE ORIGINAL CONTROVERSY

Contemplating our place in the Universe, a persistent enigma is: do we philosophise because we have independently developed abstract thought, or was this deliberately bestowed so we can philosophise? Are we our own masters or subjects in a celestial design? Can we set moral and ethical values by consensus or are these preordained absolutes?

Resolution will help to explain the ultimate mystery: "Is there life after death?" Since this is impossible to determine directly; the only option is an indirect approach. Every value in the Universe is affected by the outcome of "Does God exist?"

If there is no God, laws of physics rule supreme and all human values are arbitrary, determined by the vagaries of the age; if God exists, laws of physics are arbitrary, and spiritual values are absolute.

Among all life forms, all actions are governed towards survival, adaptation, and procreation, but only humans subordinate these vital primal evolutionary imperatives to spiritual abstractions; a defining characteristic of humanity. Vital life decisions are based on spiritual values even though they have no role in evolution. All other life forms direct every action for evolutionary benefit and appear totally unaware or indifferent to spirituality. Is this a chance development or a facet of intelligent design?

The human spirit demands resolution.

If God exists, belief or disbelief is life's most momentous decision; if God doesn't exist, nothing is of any lasting consequence anyway and humanity need not take its fate too seriously (no one else does). Like all other life forms, it is doomed to eventual annihilation; all our wriggling and writhing is merely to delay it. When humanity has finally disappeared from the Universe, what will it matter how long it had stayed?

Decision Mechanism

When deciding between various courses of action, the mind subconsciously estimates the net worth for each action by weighing the expected costs and gains, multiplying these by their respective probabilities, then summing them. But each probability is based on assumptions, which in turn are based on prior

assumptions. The evaluation of an absolute value requires absolute evaluation of all previous assumptions. If this is done rigorously working backwards step by step, one would arrive at a primal point of origin from which all assumptions begin, and that is: "Does God exist?"

To move from this point, the first assumption has to be made, which affects every subsequent assumption. To move with certainty requires absolute resolution. More than anything else, it affects the value of all aspects of life and the fate of mankind and the Universe.

If the Scriptures are true, the search is the most beneficial. If God exists, the quest is life's most important intellectual pursuit. Though proof for the existence of God is impossible, its search is not futile; resolution is possible by estimating the probabilities.

One should remember we still don't know how many dimensions there are in the universe; Einstein's four to String Theory's eleven to twenty two. God may exist in dimensions we know nothing about. Only entities of this universe can be analysed, but by definition its Creator must exist outside it.

Physicists only recently discovered they know practically nothing about 94% of this universe, thus are hardly in a position to speculate about anything outside it. The missing 94% for the time being is called dark energy and dark mass. Basically no one knows what they are. Some speculate the missing mass may be "sterile" neutrinos or numerous mini black holes; some say a slight change to Newton's Second Law dismisses the need for dark energy and dark mass. Others speculate the increased dimming of distant supernova may be due to changes in the speed of light or changes of other fundamental constants with time, or even carbon dust, thus the universe is not expanding exponentially, but these are all speculations.

Fundamental theories, mostly disagreeing with each other, vie for acceptability. As soon as one theory becomes accepted, another discredits it. New theories appear faster than older ones are resolved. Theories in physics and cosmology are changing exasperatingly.

To prove there is no God, what evidence could one possibly search for? Such inherent restrictions make absolute resolution impossible. Since the existence of God cannot be disproved, by default one has to consider the possibility that He exists.

If God created the universe, He would not be constrained by it or governed by its laws, but we only have access to the physical universe. We have no knowledge or access to the supernatural, (if we did it would become part of physics). If God does exist, the means for the evaluation are themselves entities of His creation. A basic imposed limitation is that we can never make a definite scientific resolution on this. For faith to have any value, the Original Controversy must remain indeterminate.

Blaise Pascal, the brilliant French mathematician and philosopher, was among the first to tackle the issue mathematically in an objective treatise, "Pascal's Wager." (The notion was previously proposed by Plato and Ghazali). His conclusion was that if the probability of the existence of God is any value above zero, mathematics makes it imperative to assume that He does exist; every aspect of life and all values consequently become affected.

The Philosophy of Atheism

Due to the ethereal nature of the subject, full of philosophical fog and short on hard evidence, a pertinent question is where does atheism derive its absolute conviction? Atheists don't just say the existence of God is unlikely, but *insist He does not exist*. If it can prove its case, the search would have a gratifyingly swift resolution. So what is the evidence to support their great certainty? In the West, it's based mostly on flaws in the Bible; the reasoning is since it has flaws, ergo there is no God.

But can it be so simple? Is this definitive proof? If pushed, they may add the universe is too big, religion has caused many wars and suffering, and that there's no direct evidence anyway (implying they do have evidence). The basic premise that since religion has caused much human suffering therefore it should be abolished isn't a logical deduction but merely an emotional and expedient reaction.

The deduction that since there are flaws in the Bible therefore there is no God is based on untenable assumptions such as:-

- The Bible is the only divine revelation.
- The Bible claims to be infallible.
- Scores of its authors were all infallible.
- The Bible was dictated by God.
- God revealed His presence only through the Bible.
- The objective of the Bible is to prove God's existence.
- During the past four thousand years, no mistakes were made in translations or transcripts.
- There has never been any surreptitious meddling or additions through the ages. The text today is exactly the same as it was originally written.
- God would never allow flaws or contradictions to appear in the Bible.

There is no evidence to suggest the Bible is the only revelation. The Bible itself doesn't make such a claim. (The historical position of the Catholic Church that salvation is possible only for Catholics has only recently been revoked by Pope John Paul 2, though Jews still believe salvation is only for them as a chosen race.)

The Bible was written by many different authors about whom next to nothing is known. We also know almost nothing about its editing and compilation, which was fairly arbitrary. Gospels were accepted and rejected not only on the basis of verity but also on politics (purged gospels are known as the apocrypha).

Some of these, discovered in Nag Hammadi in Egypt in the 1940s, suggest Mary Magdalene played a major role while the Apostles were in hiding during the witch-hunt following the death of Jesus. These show that Mary Magdalene was much closer to Jesus than implied in the four Gospels. They even suggest she was his wife, which would have reduced the authority of the Apostles under her. No other reason is known why such gospels were rejected and others accepted.

There is a passage that says Jesus kissed her in public. It was unusual at the time and still is today for religious men to kiss women who are not their mother, sister, or wife, especially in public. The word describing the location of the kiss has been eaten by termites. If the word had been mouth, it would imply she was his wife. The premise is reinforced by the account in all four Gospels, that Mary Magdalene went to Jesus' tomb to move the body. It was unusual to send young women to handle naked corpses unless they were close relatives. It was also unusual for men to remain unmarried at age 32. The Pharisees would certainly have mentioned this in their muck raking.

Considering the political power struggle in the early church, it appears the Gospels that gave Mary Magdalene prominence were expunged. Her opponents even resorted to propagate the rumour, still lingering, that she had been a prostitute. This timeless smear tactic would have severely damaged her legacy. If true, the Pharisees would have used this against Jesus. They rebuked him for associating with a tax collector; they would not have kept quiet about a prostitute.

Considerable discrepancies exist in the Gospels even when describing the same event. The Gospels were written decades after the death of Jesus; Matthew around 60 A.D., and John about 110 A.D. The Gospels are considered to be generally derived from another text, known as Q, now totally lost. Some passages of the Bible, such as the account on Abraham, were written after at least seven hundred years of oral narration.

Numerous translation errors from the original Aramaic to Greek, Latin, and other languages have occurred. Many changes in dialects and idioms, unknown to the scribes, led to misinterpretations. Direct evidence of politically motivated changes to the Scriptures exists in the Dead Sea Scrolls.

At least four versions of the Torah (the first five chapters of the Old Testament) have been recognised: the Yahvist, Elohist, Deuteronomy, and Sacerdotal versions, which were written over a span of at least three centuries. None of the authors of the Gospels had seen Jesus, but merely put in writing the oral history circulating at the time about him.

There is evidence that comments written by scribes in the margin, as helpful explanation, were incorporated into the actual text of the Bible by later scribes, who thought the comments had been misplaced by the previous scribe.

A question arises: why would God allow contradictions to appear in the Bible? If the objective of the Bible was to prove the existence of God, only then could one expect it to be totally free of flaws or contradictions. It might then show conclusive evidence by giving details of the cosmos that could not have been known at the time. But this is not the objective of the Scriptures. It would create a major flaw by diminishing the value of faith. If incontrovertible evidence were available, faith, the primary criterion determining eternal reward or punishment, would become worthless.

One cannot expect conclusive proof for the existence of God, thus it must always appear the Scriptures to have been fabricated; thus the necessity for some faults or contradictions in the Bible. If there were absolutely none, evidence suggesting its Heavenly source might become too convincing.

If one were shown numerous miracles followed by a tour of Heaven with angels as guides, faith would hardly deserve a reward, let alone an infinite one. It must look possible to be fabricated, but it must also contain considerable backing circumstantial evidence, as it does.

Initially the Bible may have started out with less flaws and contradictions, but human meddling through the ages reached such a level that God saw fit to send another revelation, the Koran, both to reconfirm the precept of monotheism and confirm the original Bible. The same may have occurred with the Zoroastrian Avesta, which probably started as a heavenly inspired book but became corrupted such that the Old Testament was sent, ditto New Testament, ditto Koran.

This time, the Koran says explicitly it is the Word of God dictated to Mohammad. It also says God will not allow the text to be changed, thus guaranteeing its integrity. (We know it hasn't changed since its compilation by Caliph Othman in 633.) The Koran also should not show conclusive proof of Heavenly authorship, but should also appear possibly to have been written by a mortal. The Koran is the most influential book ever written. More than any other book, it totally changed prevailing cultural and spiritual values whereas the Bible was adapted to suit local culture.

Either Mohammad was the smartest human who ever lived or was just a man of integrity chosen as a prophet. One should reflect on the probabilities of either case. On the one hand, the smartest man in history emanated from the barren deserts of the Arabian Peninsula in the 7th Century among an unsophisticated and generally uneducated tribe. No one else of any significance in any field had ever emanated from there before. The scenario has remote probability.

Having written humanity's most influential book, one would expect he would have had a lot more to say, but all his words and actions were strictly within the

confines of the book, adding credence to the case that he was not its author, but subject to it. He had no education, had been totally illiterate up to the age of forty, then suddenly and inexplicably acquired complete literacy overnight and wrote the world's most influential book almost totally free from flaws and contradictions. The probability is remote.

If it was written by another (Iranian ultranationalist like to say their compatriot Salman Farsi wrote it, though it was a second language) then why did the real author keep totally silent about it during the 22 year period it was written, especially as the Prophet's main claim to authenticity was the Koran itself?

Testimony to his character is evident from the amazing respect felt towards him by his followers, both during the years of deprivation and also when in power. Most of his numerous enemies became his most ardent followers, many sacrificing their lives for him. Few have managed that in any age.

The Koran says that if it had not been revealed by God, one would inevitably find many contradictions in it, implying some or minor contradictions may be necessary, in deference to the principle of indeterminacy. It must not be too convincing of Divine authorship, thus can't be perfect and must appear to have been possibly composed by a mortal.

A Reflection on Absolutes

What exactly is the value of human life? How much should one fear death? Is death the end to the one and only taste we ever have of existence as atheists believe, or a less traumatic transition boundary from one life form to another?

Greater than the loss of human life is the loss of the soul. Human life on earth is temporary, but the soul is everlasting. Believers are prepared to sacrifice this life for the soul; atheists are prepared to sacrifice the soul for this life like Faust (though they don't believe in the soul anyway.)

Why constraint in the pursuit of pleasure? There is only this life. What is the harm if one is discreet? If the activity is not illegal, why abstain? Believers view temptations as deliberate tests designed to evaluate faith. Nowhere can one be so discreet as to be hidden from God. Death of loved ones, illness, financial problems, the threat of poverty, lost opportunities, etc., are all sources of anxiety, stress, and regret, constantly gnawing at the psyche.

All depend on the outcome to the Primal Controversy.

Do some nations have the right to subjugate or destroy others? Is might right? Most of human history consists of wars, conquests, massacres and subjugations. America is dominated by Europeans, not Native Americans; England by Anglo-Saxons, not Celts, (DNA tests show that *ninety percent* of Britons today have Saxon rather than Celtic ancestry, whereas Saxon to Celt population ratio was only one in ten); similarly for Aborigines in Australia, Inuits in Canada, Mayas and Aztecs of Mexico, Incas of Peru, etc.

If the absolute value of evil can't be determined, it becomes merely a transient value defined by the mood of the age. The Nazis are generally considered bad, but what absolute values stipulate that they were wrong to conquer Europe and subjugate its peoples? They were acting in time honoured fashion for their own best interests, which were right for them but not for their victims. If absolute values don't exist, it's just one word against another. If the Nazis had won, they would have been viewed differently.

The U.S. invaded Iraq with little provocation and caused the death of a million civilians because they believed it was in their interest to do so. As Tony Benn (British MP) says, what is the moral basis that killing ten civilians by placing bombs on buses is evil terrorism, but killing thousands by aerial bombardment is not? Until recently one nation attacking another was normal practice, as old as history. Isn't the conqueror generally glorified and weren't great benefits made from conquest? Hasn't this been a basic part of nationalism, which is still considered a great virtue?

Hitler adopted the values of his day. If national pride was a virtue, restoring national pride to a humiliated nation was an act of great virtue. Hitler had a historical right to defend the honour of his nation, whose economy had been callously destroyed by reparations. Was he not democratically elected, adored, and supported by millions of Germans and Austrians for his policies?

WW1 was started by Austria-Hungary annexing Serbia after a Serb shot its Crown Prince. This led Russia, an ally of Serbia, to declare war on Austria-Hungary. Germany, an ally of Austrian-Hungary, was obliged by a previous treaty to enter the war to defend it. The Allies knew perfectly well about these pacts, so by siding with Russia, they knew Germany would be obliged to enter the war on the side of Austria. This hardly constitutes a crime. In abiding by their treaty obligations, the Germans were acting exactly the same as Britain and France. The conventional belief that England declared war because Germany invaded poor little Belgium is rubbish.

The only reason reparations were imposed on Germany after WW1 was that it surrendered, not that it was guilty. This demonstrated clearly to nationalists, especially Hitler, that force was a legitimate internationally acknowledged means to redress the situation. The unequivocal message from Versailles and French occupation of the Rhineland was that might is right, that victory in battle, not morality, is the final arbiter; in total confirmation of Nietzsche.

This justified Hitler's rearmament and resort to military force and war. The same rationale of nationalism and self interest was the basis for the unprovoked and inexcusable British, French, and US invasions of poor Third World countries to acquire colonies and cheap natural assets, yet these are not considered evil.

Roman subjugation of Europe is regarded as beneficial for Europe, which implies military conquest can be justified. The Romans were sophisticated, advanced, and cultured. The Nazis were much more so. If absolute values don't exist, it all depends on perspective.

The Nazi conquest of Europe was justified by prevailing values, for retribution, recovery of dignity, national interests, economic benefit, lebensraum, burden of the Ubermensch, destiny of the Aryans, etc. Nietzsche's philosophy fully justified it, sanctioning power and condemning weakness. When the memory of the suffering has receded, it will become easy to defend Nazi conquests, just as Napoleon's conquests are today. It could even have benefited Europe by unifying it, as the EU is now trying to do. Europe would have eventually reverted to democracy anyway, like Soviet states.

The Mongols massacred millions of civilians, in many instances 100% of the population. For example, when the Mongols sacked Neyshapour, one of the great cities of the world with more than a million inhabitants, not a single soul was left alive. By contrast Nazis killed only a small proportion of the population. The Nazis were sophisticated, cultured, industrialised, and advanced (the V2 rocket was the first spaceship) whereas Mongols were abjectly barbaric. Yet the Nazis are considered the worse of the two.

The white man's burden was the justification for colonialism. Nazi Ubermensch felt the same. Culturally, industrially, and scientifically, the Germans were the world's most advanced nation, whereas Mongols were the opposite. By historical standards this was enough to justify their conquests. For lack of atheist figureheads, Nietzsche, as a great philosopher on the subject, is in the process of rehabilitation and revival as the spiritual leader of atheism.

The same criteria are used to justify Israeli occupation of Palestine. Israel was formed solely through military aggression. Palestinians are treated as second class citizens in their own country, cordoned off into ghettos. Gaza is a deliberately planned concentration camp. Millions of refugees are denied the right to return to the land they have lived in for thousands of years. Why? Israel has a stronger army.

When Palestinians resist the occupation using exactly the same means used against them, force, they become terrorists. Israel's massive retaliation against civilians is justified by the West, which strongly condemned it when used against them by Nazis. The hypocrisy of the West is odious and nauseating.

The criteria used by victors are based on self-interest rather than absolute morals. If Hitler had conquered the Soviet Union *only*, he would have been regarded differently, perhaps even as a saviour.

The percentage of civilians killed by Hitler was tiny compared to those killed by the French in cold blood in Algeria, one and a half million civilians out of a population of nine million for the crime of wanting independence; the Soviets in Afghanistan, two million of a population of eighteen million for resisting Soviet expansionism; the Khmer Rouge, two million of a population of eight million for no particular reason. But the Nazis are considered evil, not the French.

Some forms of genocide appear acceptable; especially those committed by the West. Little mention is made of the destruction of ninety percent of the indigenous population of the Americas, or the distribution of smallpox infested blankets to Native Americans, a form of genocide using a weapon of mass destruction.

To determine what is right and wrong requires absolute values; otherwise actions considered evil today could become justifiable tomorrow. Secular societies consider absolute moral values relics of religion; they consider morals to be changeable by democratic consent. To determine which is valid and whether absolute values can be changed by consent, and whether democracy supersedes morals or whether morals supersede democracy, requires resolution of the Primal Controversy, as does every other value.

Political Correctness

Political correctness is admirable but counter-scientific and best ignored here. Rationality prohibits cultural and religious bias; which though easily said is intractably difficult. Science and emotion are immiscible and inhibit one another. It is necessary to be ruthlessly uncompromising in separating them.

It's easy to be neutral when the subject is a molecule, but where religion or culture is involved, entrenched emotions woven in the fabric of our existence are difficult to ignore. For many it defines who they are, giving meaning to an otherwise disquieting emptiness. It provides a comforting link to ancestors and national identity.

Throughout history, if one group acquired superiority over its neighbour, the latter without provocation was fair game for war and pillage; no explanations asked, none given. What excuses were offered by the Normans for attacking most of Europe, or the Mongols for most of Asia? (These two great conquering races eventually met in the Crusades).

It's only in recent years that mankind is learning to suppress the urge to kill or subjugate peoples of different religions and cultures merely because they can do so. Tribal and racial animosities are still alive and active in Israel, sub-Sahara, and the Balkans, where racial massacres and ethnic cleansing are recent occurrences.

An influential 19th century British handbook on etiquette said three subjects that should never be discussed at social gatherings: politics, religion, and sex, because with these emotion and dogma is involved. Entrenched attitudes turn any debate on these subjects into disputes, contrary to the objective of social occasions.

Short of verbal abuse, the easiest way to antagonise others is to contradict them on one of these subjects (especially religion), or try to convince them that their opinions are false; even worse, impose your opinion on them. One party is not going to say: "Ah, I see by the strength of your argument that your opinion is

correct and mine has been wrong", or "The logic of your argument was so convincing that I am now converted to your belief." Instead marvellous devices are contrived, real and imaginary data marshalled and cleverly deployed, lest an inch of ground is ceded, while totally disregarding any logic the other may present. In war the first casualty is truth; in discussions on these subjects, logic. On any other subject, there is more flexibility and less antagonism.

Humanism prohibits denigration of other beliefs, however false. The rationale is that there is no independent absolute standard with which the validity of any one belief can be measured, thus all should be accorded equal respect. (N.B. by the same token, secular humanism itself is just as valid or invalid as any other.) Since each opinion is considered subjective, no creed can refute another. The US government recognises witchcraft as a bona fide religion and employs wiccans (witches) in prisons for the spiritual enlightenment of inmates.

The precept applies to all religions and philosophies, but not science, which does have an independent standard of evaluation, based on the rational processing of empirical data obtained from scientific observation of natural phenomena by trained scientists in a state of objectivity, free of emotion and prejudice; the results published and reviewed by peers. The verity of the process has been proven beyond doubt by its unique ability to predict events, unlike philosophies which are subjective opinions.

Religious Intolerance

Peaceful coexistence of Muslims, Christians, and Jews in Andalusia produced a flourishing of arts and sciences that lasted for about 700 years. In the European Dark Ages, there were only about 5,000 books in the whole of Europe (according to the British historian Sir John Bagot Glubb), most of them Biblical. Practically nothing remained from Greek, Roman, or Egyptian science and literature, all repressed by the Church, while some of the 70 libraries of Cordoba and a similar number in Toledo each had 500,000 books.

Andalusia was instrumental in the Renaissance, which was soon crushed by the Inquisition. Spain then began a five-century cultural decline despite the colossal wealth it acquired from its colonies, and while Spain and Italy languished, science and industry flourished in Protestant Europe.

Napoleon decreed the first official separation of Church and State (as proposed by Montesquieu, who also advised on the separation of the executive, legal, and judiciary branches of government). This was promptly copied by the new American republic; much of the world followed suit. Freedom of worship accompanied scientific progress and economic growth.

As the Church declined, the spiritual vacuum was replaced by nationalism, which became so intense that many today can barely comprehend where Europeans derived their lust to obliterate their neighbours in the World Wars. Nationalism,

the bringer of wars, is now allowed to decay on its plinth. Multicultural coexistence and ethnic tolerance are encouraged instead, especially since these have economic benefits; peace promotes trade and discourages war in a virtuous cycle. Secular humanism has become the main philosophy in the West, and religion in the US reached an all time low in the 1970s.

Effects of the Outcome

Three basic driving forces motivate humans: material, social, and spiritual. Material forces are governed by genes and the environment and directed for the preservation of life; but the value of life is determined by the outcome of the primal controversy. If there is no God, the value of life dominates all values. If there is another life, then momentously, the value of this life becomes less than our thoughts and actions in it, because these determine our eternal destiny.

Social forces govern the interaction between the individual and society. They include culture, civil laws, familial and marital relationships, and economics. All are affected by religious laws. In theocracies, religious laws are above civil laws; secular states subordinate religious laws or ignore them. Valid priority depends on resolution of the primal controversy.

Religious laws are trivial ethereal abstractions or vital imperatives, depending on resolution of the controversy. The search is in an emotional minefield; rational methodology is essential.

The Devil is the advocate of disbelief. The defendant is the soul. The highest mental facility that can be summoned is wisdom. The judge is our sense of reason.

Some prefer the journey of life to be smooth even though it may lead nowhere; others prefer to know where they are going at the expense of comfort. A rewarding destination often involves a difficult ride; any journey has a price. The potentially great value of absolute truth justifies a high price for the search. All that is required is an unprejudiced mind; for many that is too much. Considerable humility is required to override personal and cultural pride, which reached an all time low in the 1960s, in a seismic shift from past attitudes. Cultural and social values were abandoned en masse and an extraordinary noble search for truth followed.

What a great pity that the flowering intellectual movement was dismally failed by the shallowness of the philosophies, leading to their demise as rapidly and completely as their ascendance.

The same generation within a decade adopted materialism, consumerism, and narcissism, even though these had been anathema to them in the previous decade. The spirit of optimism to find universal truths blazed from the mid 1960s to the mid 1970s then by the 1980s, the same generation that considered previous generations too materialistic itself developed into the most materialistic narcissistic generation.

Unification of Religions

The world's monotheistic religions are basically different versions of the same faith. Islam, Christianity, Judaism, and Zoroastrianism among others all have common roots and worship the same God. Core values are the same; the differences are mostly cultural. Appreciation of this should *reduce* entrenched historical animosities. Deities such as Zoroastrian Ahura-Mazda and Native Americans' Spirit in the Sky among others are one and the same God of the main monotheistic religions.

Any well-intentioned attempt to integrate these faiths is doomed by human nature, cultural conceit, and vested interests opposing it. But the appreciation that most religions have a common base will increase tolerance between faiths without resorting to the impractical attempt to change or unify them. Similarly awareness that genetically we are all essentially the same increased racial tolerance and debunked racism. Education, cultural exchange, and declining nationalism have also diminished race as a source of discrimination.

Cultural boundaries are diminished by tourism and cultural contact. The world is rapidly verging towards cultural homogeneity. Nations formerly chasms apart are becoming similar. Less difference is now apparent than in any previous generation. Many countries have adopted Western culture so completely that cultural boundaries are barely discernable. However, Islamic countries have proven the most difficult to change or Westernise. Resistance is among the general public despite forced imposition by their Westernised governments, reflecting the strength of Islam among individuals rather than as an institution. Compare this with the remarkable lack of resistance in Buddhist East Asia. Buddhist philosophy strongly opposes Western consumerism, yet despite its thousand-year root, it has been relegated with surprising speed over a generation or so. Buddhism, declining in the East, is being replaced by consumerism and the unrestrained pursuit of wealth. Taoism is more apparent in Chinese culture than Buddhism.

The third cause of animosity is religion; the most intractable. Unlike racial and cultural enmity, in many areas of the world this is not decreasing. The West European solution has been to dispose of religion as a whole.

Racialism is scientifically baseless and perverse; genetically we are all the same. Cultural differences are naturally decreasing due to the growing assimilation of world cultures. Religious animosities are the most tenacious and precarious.

Instruments for the Search

A rational search must be based on scientific methodology; our most powerful analytical tool. No other process is more verified in man's interaction with nature. Its greatest asset is its unique and supreme ability to predict action far in the future. It can also be used to analyse religious matters, even though science

has traditionally disdained to do so because of shortage of hard evidence, the inherent subjectivity, political correctness, and unpleasant history.

The momentous confrontation between the Pope and Galileo is still fresh in the Western psyche; so is the one between creationists and evolutionists (the controversy continues in American schools today). In the case of Galileo, the Pope had taken a specious stance that was not based on the Bible. Nowhere in the Bible does it say the earth is flat, or the centre of the universe, or that the Sun revolves around the earth. These were perhaps the Pope's personal opinion, based on the reasoning that man has a central role in the universe; therefore the earth must be at the centre of it (and he at the centre of that.) Any challenge to this was an affront to the status quo (also Galileo had insulted him).

An extraordinary situation has recently developed: physics and religion previously chasms apart have inadvertently collided like tectonic plates. Examples are the Anthropic Principle, cosmology, genetics, anthropology, and medical science. For example, the size of a particular part of the brain of homosexuals is twice the size of heterosexuals, igniting the debate whether nature or nurture is the cause of it. Physical evidence will either damage the foundations of religion or strengthen it. The outcome could be momentous.

Contrary to conventional belief, rationality is not incompatible with faith. Not only can they co-exist, but rationality may even enhance it. It is *not* too early to analyse religions with scientific methodology. It would be demeaning for humanity if Martians were better able to analyse it objectively.

Considerable flaws and discrepancies exist in many religions, but the same could be said about many past scientific theories, which later turned out to be true. In fact some widely accepted scientific theories still contain considerable anomalies.

Science as a source of Absolutes

It's becoming increasingly apparent the absolute truth is *not* going to come from science. Religion by default is the only field of human knowledge that still has claims on it. Science is notoriously incapable of proving anything absolute, but excels in its ability to disprove. It can tell where truth isn't, suggests where it might be, but categorically is incapable of proclaiming anything absolute. For that, absolute knowledge is required, which is unattainable.

Science still is unable to prove the world is real. Memory and consciousness exist as a physical state in the brain, thus theoretically can be artificially produced. Science cannot disprove a "Matrix" type scenario, where the thinker is a brain in a jar and this life is merely a virtual reality. Even so, scientific methodology remains the most suitable method to deal with the controversy.

Compare the progress in the last 400 years since the foundations of modern science were laid by Galileo, Newton, Bacon, and Copernicus, with the stifling dogma of 2000 year old Greek philosophies and metaphysics. Following great

advances, an expectation developed that science would soon make definite pronouncements on absolutes, God, and religion. Not only did it fail, scientists are increasingly recognising their inability to do so. Science is extremely proficient at observing, formulating, explaining and predicting within defined boundaries, but intrinsically incapable of proclaiming absolutes.

A most absolute value in physics is the speed of light. Einstein said that time and space, the most absolute of Newtonian absolutes, change and bend in order to keep the speed of light constant. The rate of flow of time changes with motion. Space is warped by mass. Einstein said whereas the old Newtonian absolutes were relative, the speed of light is absolute. Its position as absolute has been unquestioned for most of the twentieth century, but physicists are describing particles that travel faster than light (the tachyon is a mathematically viable particle, which always travels faster than light).

Some scientists say the speed of light is constantly changing, gradually slowing down. Another postulate says it is speeding up, which could account for the red shift of stars that are now solely attributed to their movement away from our galaxy. If the speed of light is increasing, the Universe could be stationary but we would still see red shifts from stars and galaxies. It would also account for the astronomical discrepancies, for which dark matter and dark energy are postulated. If the speed of light is increasing, the basis for dark matter and dark energy would disappear. If scientists can't decide on the absolute nature of the speed of light, which they can't, then they can hardly claim anything else absolute; (more in Appendix 2).

Heisenberg's Uncertainty Principle is even more unsettling. It fundamentally changes our perspective on reality; subatomic events are affected by the actual act of human observation. The very building blocks of the physical universe appear to be non-deterministic and non-absolute, dependent on intelligent observers, which are themselves composed of the subatomic particles they are observing. Physics appears a poor candidate for absolutes.

Puzzling phenomena appear faster than explained. When and if these mysteries are resolved and understood, according to precedence, more mysterious phenomena will appear to shake the fundamental foundations of our understanding of nature. Before very long, present beliefs in solid physical precepts will appear quaint.

Scientific methodology is the most spectacularly successful human endeavour in history, but it is in no position to make definite statements on absolutes; it is struggling to explain many outstanding anomalies. Science is totally unable to answer the question which has obsessed mankind since prehistory: "Does God exist?" God is the Creator of the laws of physics as well as the human mind, both of which are used to ponder the subject.

This inability may have contributed to the recent resurgence of religion or mysticism, because unlike other life forms, humans have a profoundly spiritual component in their constitution. We are generally unable to ignore or dismiss it, irrespective of race, culture, or epoch. This spiritual dimension persistently drives us to the supernatural, even though there is absolutely no evidence for its existence. This is strange irrational behaviour from the most rational species. Also this obsession has no evolutionary or physical justification.

Atheists should also employ scientific methodology, without which their position is merely a gut *emotion* rather than a viable rational theory. Their total inability to produce any evidence to disprove God or life after death makes their theory pure conjecture. A constant source of wonder for them is why mass conversion to atheism does not materialize. Only a small percentage of the world population is atheist (about ten percent). Even in former communist regimes, which for decades institutionalised it, atheism is losing ground. Where religion is in decline, other forms of spirituality emerge, which are much less rational than the replaced religion; a strange phenomenon. An example is the decline in Christianity among the young in Europe and a corresponding growth in paganism and witchcraft.

Philosophy

If science can't produce absolutes, another candidate is philosophy. Greek philosophers made brilliant efforts to explain absolute values and introduced ingenious concepts. By the standards of the time they were astonishingly sophisticated, but unfortunately mostly wrong. A growing opinion has developed that Aristotle's dogma together with the immensely cumbersome Roman numeral system set back the development of modern science and the Industrial Age by a thousand years.

After the Greeks, the preoccupation with absolutes continued with Islamic and Catholic philosophers up till the 17th century, from when science took over. Deposed by science as the top faculty of human knowledge, philosophy became distinctly human-centric. Dropping all pretences on absolutes, it adopted social and economic issues.

By scientific standards, philosophy is littered with numerous discredited theories unlike modern science (which only had a few, like the Phlogiston Theory and Phrenology). Most theories in philosophy were based on little evidence, a lot of conjecture, and enormous conviction, bound tightly together with emotion. Since the Renaissance, philosophies consist of little more than personal opinions. Their respectability derives *not* on verity or a foundation in scientific methodology, but from the ability to catch or presage the Zeitgeist. The prime criterion for a successful philosophy is to be influential, not truthful. This contrasts clearly with scientific theories, which are evaluated strictly on validity only.

In implicit admission to their lack of verity, new philosophies, instead of being built on or refinements of previous ones, tend to dismiss or discredit those before. The field of philosophy is littered with ideological shacks in varying stages of decay, whose only value now are historical curiosities (each with an impressive name). What are the prevailing philosophies of our age? How much do they affect daily life? Who are the principal philosophers today? Modern philosophy is in a sad state and verging towards irrelevance.

Using the yardstick of *influence* only, Dickens was one of the greatest philosophers, even though he didn't have a proprietary philosophy and would have disliked the description. There can be little doubt that he was the most influential novelist. He influenced practically every other writer in the West, including Tolstoy who in turn influenced Lenin. His humanity moderated Lenin's fanaticism, which would otherwise have been more like Stalin.

Nasser was a pioneer revolutionary and tremendously influential in Arab countries. He inspired cultural revolutions and regime changes in Syria, Iraq, and Libya. When he seized power in Egypt, the revolutionary council's first agenda was to decide what to do with King Farouq; the majority wanted to hang him. In the furious debate that took all night, Nasser told them to read "A Tale of Two Cities." Though they probably didn't, his view prevailed. The King was allowed to leave safely, taking his private yacht and all his belongings (including 200 suitcases and several dogs). Although Nasser was anti-British, he was tempering revolutionary zeal with an English novel written a century before in another continent and another culture.

Dickens' writings were the most influential in the most influential country, which governed large areas of the world. His books were instrumental in bringing social and legislative change in Britain, the colonies, the USA, and by proxy to many other areas of the world. Dickens bridged the chasm between the classes with considerable eloquence, humour, and pathos. He exposed social ills, unjust laws, degrading conditions in poor houses and prisons, and the plight of the working classes of the Industrial Revolution.

More than any other social activist, his message went straight to the heart of readers of all classes even though chasms apart and totally ignorant of each other. He instilled empathy and understanding while other great philosophers (i.e. influential) advocated class struggle and incited a century of international enmity that nearly destroyed the world.

The human-centric philosophies of the last few centuries are poor candidates to describe the forces driving the cosmos, explain the vastness of the universe, the meaning of life, or anything absolute. One will not find absolute truths in modern philosophy, especially as it has no claims to it, or in ancient philosophies, whose claims to the absolute have been discredited by modern science.

The only remaining claimants are religions. There are many of these; some verge on the ludicrous; the less said the better. Most are mutually exclusive; thus by definition most are invalid. Can 800 million Hindus be wrong? Can 1600 million Communists be wrong? Communism at least was rooted in the real world, based on social equality and economics, but Hinduism is pure conjecture.

None of its claims can be substantiated, nor can it summon any circumstantial evidence or compatibility with science. It didn't reckon on posterity or scientific scrutiny. Hinduism doesn't even have a uniform coherent theory but is best described as a free for all. Before it can be taken seriously, its proponents firstly should determine exactly what it is they are proposing. The creed varies enormously with geographical location and ethnicity. Each region has fundamental different premises of the creed. If we consider any postulate viable solely for the sake of respect for ancient customs or deference to ethnic sensibilities, a vast amount of conjecture will smother the search.

Defining the Objective

Consider the possibility that God created us for a purpose; there is another life, Heaven and Hell, to one of which we are destined for eternity, depending on actions and beliefs taken now. It imparts considerable urgency to the search. One cannot afford to wait for future generations to resolve the matter, or wait decades or centuries till the political climate settles to a more favourable state. The analytical tools are available today; all that is required is the will.

If there is no other life, we have nothing to lose. If there is, the risks are too great. We don't have unlimited time to ponder. The big question, on the same adjective scale as the big bang, is: "Is there life after death?" We had better find out to take appropriate action.

Absolute truths should be able to explain:-

- The meaning of life,
- Whether there is life after death,
- Do we have souls?
- Man's role in the universe,
- The difference between man and animals,
- The nature of conscience,
- The nature of consciousness,
- What is good and evil?
- Wisdom.
- Preordained fate,
- Happiness,

- Science and the supernatural,
- The stupefying vastness of the universe,
- Creation and evolution,
- Historical events,
- Everything else.

If humanity's unique ability to philosophise and search for abstract absolute truths is a deliberately bestowed capacity, we are obliged to engage it. If an accident of nature, indifference is irresponsible and inexcusable. For both cases, we have everything to gain by engaging it but nothing to lose; a win/no loss prospect.

The cost involved is minimal, the effort required is not great, but the potential gain is infinite. No other human endeavour can make even a remotely similar claim. The only requirements are wisdom, humility, and the desire to search for absolute truths. The means and the objective involve summoning humanity's noblest qualities, which are unique to our species and unknown to any other life form.

- A viable theory for the absolute truth should be considerably compatible with scientific evidence.
- The objective are absolute values that transcend the cosmos, thus one can fairly presume there should be minimal cultural and topical content based on any particular tribe or nation.
- One can also fairly assume that the theory should be universal, all encompassing, and pertinent to all.
- It should also be timeless, not based on any specific period. It should not be unrelated to any period of past or future.
- Theoretically at least, it should have the framework of being able to explain everything and in practice nearly everything, especially the major philosophical issues facing humanity.
- Only a scientific methodology can be used in the evaluation (its development has been mankind's greatest success, after survival).
- Indeterminacy prohibits absolute proof of verity and limits the extent of scientific compatibility; therefore viability and cogency depend on the degree of coherence.
- The theory should also resonate with our ethereal ability to sense the truth, even though solid evidence is lacking.
- To avoid vagueness, an unfailing sign of weakness, the creed should be explicit and specific.
- The basic premises should be free of contradictions or flaws, but in

deference to the central principle of Indeterminacy, the theory should not be flawless, but must appear plausible to have been a human fabrication.

- Basic precepts must not be scientifically refutable.
- Circumstantial evidence should impart significant probability for viability.
- Scriptures relating to the theory should contain, with allowance for meddling, significant correlation with evidence.
- Most religions are mutually exclusive, which reduces the viability for most.

Any religion or philosophy that best satisfies these criteria can be considered the most viable candidate.

CHAPTER 3 A MEASURED APPROACH

Physical Assumptions

The absolute truth should be able to explain the meaning of life, illuminate final destiny, and transcend the physical world. Before searching for it, one must first assume that such a thing exists, then by looking everywhere and studying everything, one can find the most suitable candidates. But where is "Step One"? Even if we could find it, proceeding from it involves innumerable steps, at each of which one can easily stray through invalid assumptions or slips in logic; an immensely arduous task, which even science is struggling in.

Alternatively, one could take a short cut by considering a potential candidate then examine its premise for validity. This method is the basis of most scientific discoveries. In the short cut method, only the most viable theories are considered.

If the universe developed spontaneously, a theory for an absolute truth should exist in physics. The more we learn, the closer we should get, but even such an obvious assumption may not be valid. In some ways, it appears the more we learn, instead of the laws of physics becoming simpler and more understandable, they become more complicated and bizarre. Instead, the more we learn, the more we become aware of the limitations of our perceptions. The assumption that all the laws of physics will eventually be understood by the human mind is not verifiable. Recently, physicists have begun to appreciate that they may never be able to acquire an all-encompassing Theory of Everything. In fact such a thing may not even exist, never mind whether humans even have the ability to fathom it if it does. \(\text{\text{1}} \)

Much of the spectacular advances in physics of the early 20th Century were based on simple yet very elegant thought experiments. The Special Theory of Relativity, discovered before the age of the automobile, was based on the outcome of the Michelson-Morley experiment (which showed that the speed of light is constant and independent of the speed of the source). The General Theory of Relativity was based on a thought experiment of a horizontal beam of light

http://www.newscientist.com/article/mg20627591.200-the-imperfect-universe-goodbye-theory-of-everything.html?full=true and http://discovermagazine.com/2010/apr/10-is-search-for-immutable-laws-of-nature-wild-goose-chase.

entering through a hole in the wall of a dark free-falling elevator. Though an occupant would not feel the fall, the beam would appear to bend before hitting the opposite wall. The thought experiment alone proved the viability of the theory.

In other words, till recently scientific discovery began with the visualisation of a concept, then a theory was derived from it. These days the reverse happens: from possible solutions of complex equations, scientists try to make sense by relating them to the real world, often with little success. Richard Feynman, probably the greatest physicist of the 20th Century, said anyone who claims to fully understand the Quantum Theory is a liar. The strange property of the electron that acts as a wave and particle simultaneously was discovered in the early parts of the last century, yet is still little understood.

Another major assumption is that the laws of physics are constant, which we can't be certain about. If they are varying, we have even less hope of discovering an absolute Theory of Everything. Modern physics and astronomy are based on the assumption that the speed of light has been constant since the big bang, but this may be invalid (more at Appendix 2).

A refinement of the short cut is to adopt a method commonly used in science; first a postulate is proposed then subjected to rigorous assessment to evaluate validity. This is how the structure of the atom was discovered. Physicists could have waited until empirical data became so complete that its structure could be readily deduced (we now have actual photographs of atoms). But in 1913, Bohr made an inspired intuitive postulate, which correlated with available evidence explaining how atoms emit and absorb light of characteristic wavelengths. His postulate became widely accepted, even though major anomalies remained.

Dubious Postulates

Any scripture inevitably has statements or claims, which can be assessed for validity under scientific scrutiny. Scriptures with a heavenly author should be free of major flaws and contradictions.

A recent religion is the Latter Day Saints (founded 1830). One cannot say with certainty whether it is fabricated, but one can estimate the probability. For example, where the Mormon scriptures claim Jesus travelled to America, we can evaluate the probability of such a literal trip having taken place, the logistics, it's unaccountability in the Bible, the lack of evidence or witnesses, the ocean going ability of the ships at the time, why no mention was ever made of this by anyone for over nineteen centuries till it's revelation to Joseph Smith on pages of pure gold sheets, which subsequently disappeared without trace; what could have been the motivation or reason for such an epic journey; where did they stop along the way, and what maps and navigation aids were used, etc. Conversely the potential motivation for fabricating these revelations by Joseph Smith and their value and convenience for the founder and leader of the Mormon community can be

assessed. Jesus could have made the trip in a miraculous flash, but why wasn't it recorded by any of the disciples who accompanied him?

In fabricating religions, human authors usually have short-term interests in mind, understandably, as material benefits are of use only in their lifetimes. The benefit is worth the risk of exposure centuries later. Loss of face after death can be an acceptable trade-off for material gain while alive; especially when considering the gullibility of people in general and the politically correct disdain of exposing respected cultural figures as fakes. The evaluation would be difficult if false prophets had posterity in mind rather than short term benefits.

Other motivation for forming religions and sects derive from a natural propensity, often by clergy, to modify an established creed. In effect they hijack a body of existing allegiance. Religions lend themselves to such manipulation because of their inherently dogmatic and unverifiable nature; the practice has been normal through the ages. Subsequent adherence to the new creed becomes necessary to avoid discrimination or persecution. Ethnic allegiance and elaborate ceremonies soon make the new religion a revered cultural heritage and questions on the integrity of the creed or founders are disdained.

Many religions decay naturally; few survive exposure to the light of reason. Some are eliminated by force; others remain due to national sentiments. The Viking religion, with a plethora of human look-alike gods, was based on a warrior culture. Those killed in battle were taken to Valhalla in a Viking long boat by Odin (aka Wodin for whom Wednesday is named) and Freya (ditto Friday), together with an entourage including Thor the god of thunder (ditto Thursday). Natural death was considered a cow's death (though cows invariably have violent deaths). All this makes fine setting for Wagner, but there must be astonishing significance to the Viking long boat, chosen by the creator of the universe as the most suitable mode of transport for traversing the cosmos; similarly for Viking dress and armour.

Others are Greek and Roman mythology, but their adherents didn't consider them as myths, literally believing in their pantheon of gods. For centuries, Christians were persecuted, tortured, and killed for refusing to worship the gods on Mount Olympus, who generally spent their time squabbling, dabbling in adultery and occasional bestiality (with swans), behaving and dressing surprisingly like themselves in togas, skirts, sandals and headbands, armed with swords and shields.

Hindus believe their main god, abandoned helpless in the jungle at birth, was weaned and brought up by monkeys. These are *not* considered allegorical or figurative events like Tarzan, but actual real occurrences. In the 1990s a mosque was destroyed on the grounds that it was built on the exact location of the birthplace of this god. Such claims should be unsparingly set upon with a scientific scalpel.

Using boundary limits one can estimate the probability of the metamorphosis of the soul. At which point in the animal kingdom does this stop? If insects have souls, what about smaller creatures, bacteria, fungi, and viruses? Is it acceptable to kill these? If rocks and other inanimate objects have souls, where is the boundary? Rocks don't die, so are their souls permanently fixed? Do particles and molecules have souls? What defines the limits?

If souls move about among life forms, then why is it wrong to kill animals? It's best to kill all the lower animal forms to enforce a general upward movement of souls to higher life forms. In a widespread animal cull, the souls would have nowhere to go but up, back to humans.

Can Hindus really justify that Harijans are unclean by birth, fit only to clean lavatories? Are Brahmans the most superior race in the universe? Do the Brahmin Hindu clergy still control the gods, as claimed in their scriptures?

When all life on earth inevitably ends, where will all the souls go? Why have the gods appeared exclusively to Indians? There must be great importance to the jungles of India, chosen from among all other places in the Universe as the preferred home of the gods; ditto attire, personal effects, body jewellery, which are all identical to theirs. If they can't supply circumstantial evidence or present a coherent theory, the creed is little more than conjecture.

Scepticism arises when gods share the culture, customs, and appearance of the age when the religion was formed. Forming gods in a human image makes them so much easier to relate.

Success of a religion depends on the number of adherents, thus the creed is usually adapted for palatability. This contrasts dramatically with monotheistic religions, where the exact opposite applied: they totally overturned the prevailing culture and completely changed its values, forcing the culture to change to it.

Monotheistic Prophets

Fabricated religions usually have some or all of the following:

- They are adapted to prevailing cultural tastes.
- Deities live nearby, sharing local culture and attire.
- The main beneficiaries are a local ethnic group.
- There is a pronounced racial/tribal/national component in the creed.
- Little or no provision is made for other races or nations.
- Considerable flaws and contradictions exist in the creed and scriptures.
- Salvation is attainable only for its adherents.
- Considerable modification of the creed occurs with time.
- Historical narratives contain passages that can be scientifically discredited.
- Specific predictions fail to materialise.

Zarathustra, Abraham, Moses, Jesus, and Mohammad all preached strict monotheism and opposed the prevailing idolatry (Jesus opposed the corruption of the clergy). All did so at great risk. Their preaching was totally against the values of the established culture. All met with furious and violent opposition. Not only did they not adapt their creed to the local culture, but instead advocated revolutionary change in culture and beliefs.

Their actions were incompatible with the above parameters of fabricated religions. Why did they put their lives in danger, oppose revered prevailing culture, antagonise those in power, and make fatal enemies, with no prospect of personal benefit? All came from comfortable backgrounds; none had shown previous rebelliousness. All faced immediate danger with little or no prospect for success, didn't waver in their calling, and showed remarkable disregard for their own safety.

Zarathustra spent ten years preaching against idolatry before he had any success. During this time, he was imprisoned and repeatedly threatened by the clergy. Abraham was disowned by his father, and thrown into a fire for his destruction of idols. Moses' life was threatened, forcing him into exile, from the splendid life as a prince in the most affluent nation to a subsistent shepherd, then in a suicidal move, went back to Pharaoh's court as a fugitive of murder to demand the release of a whole race of slaves. One of the miracles was that he was not killed outright for his impudence.

Jesus knew the fatal enmity he would incur by physically attacking and humiliating the clergy in the temple. A characteristic of all of these prophets is their utter disregard for personal benefit and safety.

As a result of his preaching, Mohammad lost all his material possessions, confiscated by the Meccans for opposing their idols. They also confiscated all the possessions of his family and followers. After years of abject poverty, he was offered governorship of Mecca, power, and riches if he would only drop his opposition to the idols, which were the lifeline of the Meccan economy (from the pilgrims). He refused outright.

Why did theses prophets, extraordinarily out of character, give up their peace and comfort and cause so much trouble, material loss, and personal danger? They appear to be acting against their own natural inclinations, rather than catering to them. If not sent by God, what was their purpose to adopt such dangerous uncompromising stances?

Instead it is in perfect compatibility with the notion that God chose prophets from among the righteous, to admonish and warn compatriots. Would He not send prophets occasionally to admonish and guide mankind? Would He not choose His messengers from among men of integrity?

Objective

The theory of monotheism of Islam, Judaism, and Unitarian Christianity is considered for evaluation as the most viable candidate. Islam, the most recent, uniquely confirms Christianity, Judaism, and other monotheistic religions. Also uniquely, it doesn't claim salvation only for its own adherents. Its universality is the most compatible with the equality of man.

The Koran is the only book that claims to be the actual word of God, rather than an inspiration. It confirms both the Old and New Testaments in their original form, and shares important precepts with the original Avesta.

If most religions were true, many gods exist, each having developed a parochial partiality to a particular nation, race, tribe or location, but then which of them created the universe? To avoid delving into subjects we know almost nothing about, the nature of God, and whether it's possible to have a group of gods creating the universe together then each separately adopting a tribe of humans, let's consider only the two most likely scenarios:

- 1) The universe formed spontaneously.
- 2) It was created by one Almighty God.

Any attempt to accommodate all religions is self defeating and futile. In alternative (1) all religions are false. (Only the original version of each religion is considered.)

Candidates

1) Hinduism, 2) Jainism, 3) Buddhism, 4) Taoism and Shintoism, 5) Zoroastrianism, 6) Judaism, 7) Christianity, 8) Islam, 9) Unitarianism, 10) Baha'ism, 11) Sikhism.

Hinduism

Around 1500 B.C., much of the Indian subcontinent was conquered by Aryans, who brought with them their rituals and beliefs, compiled in the four books of the Veda.

Significantly, these were adapted to suit the newly conquered lands. For example, Indra, the ruler of the gods of the mid-region of the sky and the god of storms, is depicted annually smiting the drought dragon Vritra, which was responsible for holding back the mountain waters:

"In the three Soma bowls he quaffed the juices," then with his thunderbolt, "he slew the Serpent that rested on the mountains, and quickly flowing, down to the ocean sped the waters."

This passage from the Rig-Veda shows adaptation of the scriptures to geographic topicality; Aryans in Central Asia didn't have access to the sea. (Soma was an alcoholic drink favoured by the Aryans).

John B. Noss in his book "Man's Religions" summarises Hinduism (in this chapter quotes from his text are in italics):

"Hindus have an extraordinarily wide selection of beliefs and practices to choose from: they can (to use Western terms) be pantheists, polytheists, monotheists, agnostics, or even atheists; dualists, pluralists, or monists. Morally, they may follow a strict or loose standard of conduct, or they may choose instead a supramoral mysticism. They may live an active life or a contemplative one; they may spend much time on domestic religious rituals, as most of them do, or dispense with these completely. They may worship regularly at temple or go not at all. Their only universal obligation, whatever their divergences, is to abide by the rules and rituals of their caste and trust that by doing so their next birth will be a happier one."

In other words they can believe whatever they like and no central governing authority can say otherwise.

After conquering north India and subjugating its people, distinct social classes developed among the Aryans. Firstly were the nobles, followed by the priests or Brahmins, then the common artisans, and peasants. At the bottom were the enslaved natives. The first three classes were comprised of tall light skinned Aryans, while the slaves were the dark skinned native Indians or Dravidians.

The first three Aryan classes held themselves aloof from the natives. Marriage was forbidden across the colour barrier, as well as social intimacies, eating together, or even drinking from the same cup, similar to South African Apartheid. The Untouchable caste today is descended from these original dark skinned Indians. The Hindu word for caste is "varna", which means colour.

(The Aryans developed a similar caste system in neighbouring Persia, but instead of the slave caste, they developed a military caste. Here too, movement between the castes was forbidden, until the abolition of the caste system by Islam.)

Soon, a power struggle developed between the two top castes of Brahmins and nobles.

"Religion was still in the making. The nobles were busy fighting and administering new territory and had to rely on the priests more and more to carry on the necessary religious functions. Meanwhile, the supreme regard in which all held the Brahman or holy power in the sacrificial prayer, resulted in swiftly raising the prestige of those whose function was to utter it. Indeed, the Brahmins finally came to claim a position of more vital position than even the gods. As we have already seen, the sacred formula, once uttered, was deemed to have a compulsive and magical efficacy. Gods as well as men had to obey it."

Having established the superiority of the Brahmin caste over the gods, the nobles were hardly in a position to compete. The Brahmins thus not only came on top in their power struggle with the nobles, but also occupied a pivotal place of power in the universe, administering Heaven, Hell, Earth, and cosmic forces.

At this stage, new scriptures appeared, called the Upanishads, in which transmigration of the soul is introduced. No mention of this was made in the Vedic scriptures. Since transmigration did not have Aryan origins, it was probably adopted from local Dravidians.

In these scriptures the justification for the Untouchable and lower classes, which still endures, is conveniently explained. The reason they are born Untouchable is that they have sinned in their previous existence. Thus to try to upset the status quo or protest its injustice is tantamount to heresy, which of course will lead to an even worse fate in the next life, as an animal for example. Thus Untouchables should be content at the bottom of the heap in this life, because cleaning lavatories and menial work is better than being a snake or lizard.

The slayer of a Brahmin enters the womb of a dog, pig, ass, camel, cow, goat, sheep, deer, bird, Kandala, and Phukasa.

Brahmins show great tolerance to these animals, even though they may be the murderers of their forefathers.

... Any Brahmin who steals gold from another Brahmin shall pass a thousand times through the bodies of spiders, snakes, lizards, of destructive animals and of destructive Pukhasas."

It should be to the benefit of these souls if all spiders, snakes, and lizards were killed, in order to expedite the thousand cycles and get them back to more elevated life forms. Not killing animals only prolongs the misery.

The fallibility of human nature suggests that there will always be a constant movement from the supreme Brahmin caste at the top of the pyramid downwards toward lowly insects. If at each transmigration stage, the numerical difference between those going down from those going up were even a tiny fraction, then inevitably before very long there would be no one remaining in the upper life forms, especially since there is an absence of repentance, atonement, or forgiveness in the creed.

If human nature was inherently pious, the opposite would occur; before long all would end up as Brahmins. No numerical limits are specified in the creed. Over time, this would cause total elimination of insects and lower life forms.

Another paradox in metamorphosis is that if humanity all refrained from sin, there would no longer be the need for animals to bear the souls of sinners. Would animals sense this and stop breeding? Or can animals be devoid of souls were a shortage of these to develop? Does the number of animals depend on the piety of humans?

The probability that the rates of transmigration of the soul moving upwards or downwards have by chance formed a perfect balance is infinitesimally small; another flaw in the precept of transmigration.

If a perfect equilibrium is not maintained, all souls will inevitably end up at either end, unless the stipulation is made that the two way flow rates must be equal. But this presents another flaw because the quota system detaches the fate of the soul from its actions. If everyone is good, the quota would still require many to go down the hierarchy. Without the quota system, eventually no souls would be left either for insects, or in times that all are bad, none for humans.

If animal souls are predetermined to move upwards only, what is the justification? Can animals be good or evil? Are predators evil for killing other animals? Do they have a choice? Why can animal souls only move up, while human souls only move down?

Another flaw is that the number of souls is determined by insects. Presumably each insect and microbe has a soul, thus the number of souls is determined by the availability of food.

The caste order system was redefined in the Upanishads, the later scriptures. This time at the top are the Brahmins, then in second place the displaced nobles or Kshatriyas, not counting the gods who are below the Brahmins but above the nobles. Below these were the vassals (Vaisyas), then the servants (Shudras), and at rock bottom the Untouchables or outcasts.

Hinduism hasn't been idle all this time; today there are over 2000 castes, but it still is not specified where the rest of mankind fits in the caste system.

The amazing feat of Brahmins in elevating themselves above the gods can be seen in better perspective when compared to the powers of the Pope, who can canonise ordinary mortals, whereupon they come back to life and become omnipresent, being able to hear and answer prayers from anywhere in the world. Canonisation by Papal decree causes the acquisition of godly attributes.

Many Hindus, especially the demoted nobles, became disillusioned with the racial supremacy of Brahmins. Also the endless series of rebirths up and down the caste and animal hierarchy together with its endless suffering presented a depressing prospect, especially as there is no scope for atonement or pardon in Hinduism. If one steals gold from a Brahmin, there is nothing to do but endure the thousand life cycles as spiders and lizards.

One of the sceptics among the nobles developed an alternative to this harsh view: Jainism. Another was Buddhism.

Jainism

This was started by a Hindu sceptic, known as Mahavira (meaning Great Man). This derivative of Hinduism says salvation can be obtained in this world provided two strict conditions are met:

1) Saving the soul from evil is impossible without practicing the severest asceticism.

2) Maintaining purity and integrity of the soul requires non injury to any living being.

He doesn't explain on what evidence these conditions are based, what the rationale is, or how strict asceticism brings enlightenment. The nature of the enlightenment is not clear, nor is there reproducible evidence of this except for a natural high induced by extended fasting.

This asceticism is most extreme; the only sustenance allowed is from begging. If the majority converts to Jainism, mankind would be composed of millions of naked scraggly beggars. Economies would grind to a halt though animals would rejoice and the planet would make a glorious revival. An inherent limitation of the creed prevents all humanity, or even a majority, becoming Jainists; today only a few million exist. Ghandi was one of its followers.

If begging was conducive to enlightenment, a considerable portion of the world's mendicants would be enlightened intellectuals, but I suspect they beg to differ.

Women have poor prospects in Jainism. They can only be saved when they come back as men. A strict stipulation is that adherents must be absolutely naked at all times; nor is any exception made for cold climates.

The founder of the sect lived on a grain of rice per meal, never washed, deliberately ignored natural bodily needs, and soon turned into skin and bones. He walked with a broom so that he could sweep away any insects from his path, lest he tread on them. Though often cruelly abused by others, he endured all silently. He didn't stay more than one night at any place, lest an affinity develop to it or its people. He avoided all pleasantries lest any affection should develop.

Anyone who has ever ordered a dish of meat or fish, as opposed to eating these from begging and leftovers, is complicit in harming animals, thus forfeits salvation but can try again next time around, after several obligatory lives as animals for sharing in the sin of harming them.

After thirteen years of strict asceticism, Mahavira reported suddenly attaining enlightenment, but what was the nature of the enlightenment? If it involved a surge of knowledge, what is that knowledge? Where is the evidence that asceticism and non-harming of animals brings an enlightened burst of knowledge and salvation? If no increase in knowledge was involved, but rather a surge in emotion, it would resemble a trance or ecstasy.

Such emotional states can also be induced by narcotics, where the subject also feels a great sense of enlightenment, but would be hard pressed to explain why. Taking pills is more convenient than 13 years of begging, deprivation, and starvation, totally naked, (also better for the economy). The values presented here are incompatible with absolute values.

Buddhism

Buddha was another sceptic from the nobles' caste. He too was disillusioned with Hinduism and also attempted to find enlightenment as an ascetic and mendicant. In addition to Jainism, he attempted other methods that elders and sages at the time claimed would bring enlightenment. After years of starvation he gave up, proclaiming it all futile. Eventually under a fig tree, he too had a eureka moment. It occurred to him that the only way to end suffering and misery is to reprogram one's desires and revaluate expectations.

He advocated avoiding the extremes of asceticism and hedonism, adopting a "Middle Path" instead. Having purged his mind of "wrong states of mind" and all sensual yearnings, he developed an ecstatic state of awareness or wakefulness. He said that such a state is not physically induced by starvation or asceticism, but by the voluntary elimination of desires.

However there isn't much evidence of spontaneous ecstasy from this either. Fasting is initially uncomfortable, but after a few days the constant gnawing pain of hunger develops into a natural state of mild euphoria. A similar effect is experienced by joggers; the initial discomfort from physical exertion turns into "runner's high." Similarly in drowning; the initial unbearable discomfort of suffocation develops into euphoria, as described by base divers. Such cases of induced elation are moderate, not ecstatic.

Newton's eureka no doubt induced thrill, a moment of ecstasy. However, school children who are obliged to acquire exactly the same knowledge feel anything but.

The thrill Buddha experienced was also from the discovery, just as anyone may experience after a perceived major discovery, otherwise Buddhist monks would regularly be in a state of ecstasy as they acquire the same knowledge that Buddha had.

Monks are more likely to be in a state of satisfied contentment rather than ecstasy, because having renounced most temporal urges they become free of most of life's hassles, such as working for an income, pleasing the boss, meeting rent, mortgages, feeding the family, providing for their future, school and college fees, marital hassles, etc.

Buddha stressed he had nothing to say about eternity, the fate of the world, or life after death. He said he was not concerned with these, because they do not profit us, instead he stressed that his teachings reduce human misery.

His own words on the subject:-

"Bear always in mind what it is that I have not elucidated, and what it is that I have elucidated. And what have I not elucidated? I have not elucidated that the world is eternal; I have not elucidated that the world is finite; I have not elucidated that the world is infinite; I have not elucidated that the soul and body

are identical; I have not elucidated that the monk who has attained the arahat exists after death; I have not elucidated that the arahat both exists and does not exist after death; I have not elucidated that the arahat neither exists nor does not exist after death. And why have I not elucidated this? Because this profits not, nor has to do with the fundamentals of religion; therefore I have not elucidated this.

And what have I elucidated? Misery have I elucidated; the cessation of misery have I elucidated; and the path leading to the cessation of misery have I elucidated. And why have I elucidated this? Because this does profit, has to do with the fundamentals of religion, and tends to absence of passion, to knowledge, supreme wisdom, and Nirvana." (Arahat is a sort of enlightenment.)

This shows a pronounced human-centric philosophy based on emotions rather than absolute values.

He had a strange perception of religion, which includes misery, but not the relationship between the body and soul, the fate of the world, or life after death.

Taoism and Shintoism

The history of Taoism and Shintoism further demonstrates the tendency, often by clergy, to deify rulers and national icons, and generally adapt creeds for political ends. Taoism is practically obsolete now, but it played a very influential role in Chinese culture. The philosophy started around 550 B.C. in China as an atheistic anarchic anti-intellectual creed that valued harmony with nature above all else. Shen Tao, the founder, said: "Knowledge is not to know."

He despised all knowledge, believing that knowledge brings self-assertion, which hinders the smooth course of the Tao, the eternal Way of the universe (essentially Nature). He believed the chief aim of humans is to attain fullness of life through harmony with the Tao. All man's ills spring from developing civilization, which runs counter to the flow of Nature. Nature is stronger than man, thus it's a losing battle. He ridiculed virtue, and dismissed right and wrong.

On this basis, animals have the greatest fullness of life, because they are most in harmony with nature and are not troubled by morality. It implies we should dispose of knowledge, emulate animals, and revert to a hunter-gatherer style of subsistence. This would greatly benefit the planet, reviving it to its former pristine glory, but it's doubtful that absolute values are involved.

For many centuries Taoism was the major religion in China, but in the 7th Century faced with the increasing popularity of imported Buddhism, Taoism was restructured to compete, borrowing heavily from Buddhism. In a remarkable reversal, it became theistic with a pantheon of domestic gods and spirits; a holding action against foreign encroachment.

Note the reversal of strictly atheistic Taoism to theism due to popular pressure; another demonstration of the extraordinary, unique, and immutable tendency of humans to revert to theism, in perfect accord with our Primal Covenant.

Following widespread popular response to this, Heaven and Hell were also added to the creed. Then it was proclaimed that the supreme deity had been the Jade Emperor all along.

These relatively recent developments in the 11th Century provide a documented demonstration of the ageless tendency for politically motivated alterations of religious precepts.

Similar developments formed the basis of Shintoism in Japan, which imported Chinese religion and adapted it to Japanese culture. Developed at the Imperial court, it's understandable that the Emperor became deified. But in a new development, though the Emperor is described as the direct descendant of the great sun-goddess, the whole Japanese people are also descended from gods, though lesser deities. The Japanese, as a race of semi gods, were naturally convinced of their racial superiority over the rest of the world, who are not descended from gods. (DNA analyses show they are descended from Koreans).

All this may seem quaint, but Shintoism was the official state religion in Japan, strictly observed and fervently believed in, till MacArthur abolished its compulsory enforcement in 1945. Like Hinduism, its adherents now are mostly fanatic ultra-nationalists.

In dramatic contrast, Islam discourages nationalism. Muslims have a stronger sense of brotherhood with Muslims of other nations and races compared with non-Muslims of their own nationality. No vestige of racialism exists; Islam is practically blind to race.

(Western media occasionally make the absurd claim that Arabs, in their opposition to Israel, are anti-Semitic. Arabs are Semitic, whereas Jews are racially mixed through two thousand years of inter-marriage with Gentiles. The Jews even have names for the racial differences of their adherents, Ashkenazi for European and Sephardic for Asian and African extraction.)

Zoroastrianism

This is the first recorded monotheistic religion, dating from great antiquity (estimates from 1200 BC to 3000BC).

The Aryans also settled in Persia (the name Iran is derived from Aryan) and their polytheism became the state religion. This was confronted by Zarathustra, who uncompromisingly opposed it just as Abraham and Mohammad did later on. Each opposed the established state idolatry and their powerful clergy in a suicidal undertaking with poor prospect of success. All were intensely opposed and persecuted.

Though their lives were threatened, they never compromised their strict monotheistic stance, even though it was greatly to their benefit to have done so. Their predicament is analogous to a single figure calling for the complete overthrow and destruction of the Catholic Church in the middle of the Inquisition.

Each claimed to be a prophet sent by God to replace false idolatry with monotheism. Judging by the close compatibility between the major religions, it's fair to suppose Zarathustra was a prophet, just as Abraham, Moses, Jesus, and Mohammad were. His original precepts were remarkably similar. (Secular historians allege Moses copied his precepts from Zarathustra, Jesus from Moses, etc.)

After the establishment of Zoroastrianism, its uncompromising monotheistic base in time honoured tradition became corrupted by the powerful clergy caste; in addition to supreme God Ahura Mazda, they ended up worshipping Zarathustra himself, as well as fire.

Zarathustra vehemently condemned idol worship and attacked their clergy (the Karpans) in the Avesta for doing so; yet despite this the chief Aryan idol Mithra, the god of light, became reinstated in later versions of the Avesta, and became an object of worship, even though Zarathustra had specifically said this was the greatest heresy.

"The shift from moral regeneration to considerations of ceremonial purity marks much of the history of Zoroastrianism." Fire, initially a symbol of purity and light, became itself an object of worship. Mithra was also worshipped by the Romans even though it was from Persian, their adversary for seven centuries, it developed a great following in Rome and almost became the state religion but for Christianity. The appeal was not so much due to the similarity of Mithra to Venus but the new philosophy that came with it, stressing honesty and integrity and defining the novel absolute concepts of good and evil.

The trend, which applies to many religions, is one of man's greatest misfortunes. From God's perspective, a great heresy is the deliberate corruption of heavenly revelations for the sake of power or influence of a clique, especially since they have been entrusted with and have accepted the responsibility of preserving it. The clergy actively perpetrated this trend, soon acquiring pivotal powers of arbitration over matters of ceremonial purity.

Zoroaster was highly venerated in antiquity. The Greeks and Romans were much impressed by what they heard of him and his religion. How greatly they were impressed is evidenced by the astonishingly numerous references to him in the extant literature and by the fact that Plato was reportedly prevented, shortly after the death of Socrates, from going to Persia to study Zoroastrianism at first hand only by the outbreak of the War of Sparta with Persia in 369 B.C. (from Noss).

Some scholars speculate that if Xerxes' fleet had not been destroyed by the storm, Zoroastrianism might have become the major religion of Rome and the West. If the monotheism of Zoroastrianism had not become defiled by idolatry, it might have deserved it.

Short Summary

The criteria for choosing the most suitable candidate religion:-

- 1) The creed should be based on absolute values rather than human centric ones such as how to attain happiness or reduce suffering. These are unlikely to exist independent of humanity.
- 2) The origins should not be rooted in cultural or historical events.
- 3) The basic premise should be viable, free of flaws and contradictions.
- 4) The major claims should not be blatantly incompatible with the laws of physics.
- 5) There should be some circumstantial or indirect evidence supporting it.

Essentially there's little compatibility between these conditions and the three major Indian religions, Hinduism, Buddhism, and Jainism, (actually Buddha was from Nepal).

Hinduism isn't really a religion, more a free for all, in which its fundamental precepts change with castes and geography. Its scriptures are inconsistent and flawed. The gods differ hugely with geography.

The description of Creation in the Upanishad scriptures depicts the sacrifice of a huge Cosmic Cow. After dismemberment, the head became the sun, its eyes the moon, its hair the stars, etc. Who did the dismembering? It did it itself, by self-dismemberment. But what was the Cow doing before the creation of the universe, and what did it feed on? Having zero compatibility with physical data and zero evidence it can hardly be considered a viable theory. There cannot be much doubt that these are fabrications of a rustic culture. If figurative interpretations are allowed, anyone could present any story.

Jainism and Buddhism are strongly humanistic philosophies with no claims to divinity or even divine inspiration. These were generously bestowed on them by zealous followers after the deaths of the founders; such is human nature.

Zoroastrianism started out strictly monotheistic, opposing the culture of Aryan polytheism. In the fight between good and evil, light and darkness, God became equated with light, leading to excessive reverence for and even worship of fire.

The Greeks and Romans developed a plethora of gods. The Jews for many centuries worshipped idols in addition to their supreme God. Buddhists deified Buddha, an atheist. Christians deified Jesus several centuries after his death. Catholics developed saints who can hear and answer prayers; something even the great prophets cannot do. Thus saints appointed by the Pope have greater power and higher status than prophets, appointed by God.

Even strictly monotheistic Islam was not immune to this trend. Some sects developed saints that can answer supplications even though deceased. Some fanatic sects have almost deified Ali, while Sufis talk of union with God.

Shintoists believe the Japanese Emperor is semi-divine, descended directly from the sun-goddess, and the Japanese race from lesser gods.

Most have to be false because of their mutually exclusive nature.

Humans have shown a historical propensity to deify cultural icons, which increases the influence of arbiters of the sect. Examples can be seen in Zarathustran, Brahmin, Shinto, Taoist, and Christian clergy.

In notable contrast to human centric philosophies, are the strict monotheistic bases of original Zoroastrianism, Judaism, Christianity, and Islam.

Basically their original message was remarkably similar:

- There is only one God, the Creator of the Universe.
- All idol worship is strictly forbidden, also images of God.
- Man is endowed with free will and a soul.
- The war between good and evil is engaged within man's mind.
- · Certain rules and restrictions are imposed by God.
- Definitions of good and evil are given (which are all similar).
- The advocate of evil is the Devil.
- At an unknown time in the future, all mankind will be brought back to life and held accountable for their actions.
- The good will be rewarded and the bad punished.

The degree of compatibility between the creeds of major religions is significant. Most Unitarian religions share basic precepts, differing mainly in details of ceremony and history.

Consider the options open to clergy. On the one hand they can instruct laity to seek their peace directly with God, relegating themselves unobtrusively to the background (Protestants), or they can claim that arbitration with God is only possible via them (Catholics).

Zoroastrianism lapsed to polytheism, the Israelites to idolatry, and Christians developed the Trinity. The significance is lost that the word is not mentioned even once in the Bible, nor did Jesus ever make any claim to divinity.

The Premise

Hinduism, Jainism, Buddhism, Shintoism, and Taoism are not serious contenders for absolute truths; they are human centric, flawed, and don't even make such claims. Baha'ism is a recent offshoot of Islam, so is Sikhism, which combines monotheism from Islam with transmigration of the soul from Hinduism. Their validities depend on those of others.

Original Zoroastrianism, Judaism, Christianity, and Islam among others are all variants of monotheism, totally compatible with one another, though cultural pride prevents many from seeing this.

Figurative interpretations are to be avoided. The Avesta is too flawed to be taken literally. The Bible has flaws and contradictions, but these are more than compensated for by its virtues.

The reasons for adopting Islam as the most suitable theory for evaluation here are:

- It incorporates Judaism, Christianity, and other religions.
- The Koran claims it has not and will not be corrupted, which unlike other scriptures precludes any excuses in this area.
- It is the only scripture that claims to be the actual word of God.
- It is the only scripture that has survived intact in its original form, unchanged in fourteen centuries.
- It is the only scripture that confirms other scriptures (in their original form).
- It emphasises personal piety, belief, and actions rather than inherited religion or inherited sins.
- It suppresses cultural, tribal, and national issues; delegating these under the monotheistic creed.
- It does not favour any race or tribe.
- It has unrestricted availability and stresses universal equality of all humans in God's perspective, and the brotherhood of its adherents over and above race or colour.
- It has the least human centric philosophy.
- Most religions were formed to suit and appeal to the local culture; Islam was the exact opposite.
- It strongly opposes any personality cult for its founder or for any other prophet, unlike most of the others.

Before beginning the evaluation, a major issue must be addressed. Where do other life forms fit in the picture? Does Pascal's Wager apply to animals too? Are they also destined for Heaven or Hell?

A basic premise is that God is just (there is nothing we could do if He wasn't and decided to punish all humanity for no reason at all). Being just, He would not punish animals for not acting beyond their capabilities and would not impose on them regulations beyond their comprehension.

Most animals have little or no sense of self-awareness. Nearly all animals cannot recognize their image in the mirror (among the few ways available to deal with the notorious difficulty of delving into their minds to gauge the degree of their consciousness and self awareness.)

They appear devoid of deep consciousness, ethics, spirituality, or morality, even though we share 98 % DNA with them.

The more we study animals, the greater the physical similarities between humans and animals become apparent; this makes our profound mental disparity difficult to explain.

The burden of faith can only be on those who have the ability to understand it. Animals are devoid of this, which is why we never see them praying (including the praying mantis).

Having satisfied their natural urge to feed and procreate, animals rarely trouble themselves with the hierarchy of needs that most humans are obsessed with and in pursuit of which vast resources are expended: self-esteem, respect, knowledge for its own sake, aesthetics, artistic enrichment, self-fulfilment, and transcendence.

This can't be explained by brain size alone; some animal brains are much bigger than humans'. The vast discrepancy is difficult to explain by evolution, but happens to be perfectly compatible with this theory; another coincidence in a long series of remarkable coincidences.

We don't know how deep consciousness works, or from which part of the brain it emanates, but all humans have it but no animals, even though the brain mechanism for both are exactly the same and our brain structure is very similar to apes.

Deep consciousness and spiritual awareness are the essence of the soul.

An uncanny notion implied in this theory is that as soon as any life form in the universe reaches a state of intelligence similar to ours, it too will become aware of and conscious of the supernatural, the concept of God, and life after death, because fundamentally it becomes in its interest to do so, as predicated by Pascal's hypothesis.

(NB: the Scriptures explicitly confirm the existence of other life-forms in the universe that we know nothing about, who may be similarly engaged in this trial as we are).

CHAPTER 4 A RATIONAL APPRAISAL: COSMOLOGY

Introduction

The text of the Scriptures mainly consists of warnings, regulations, admonishments, historical narrative, or description of the next world. These cannot be decisively proven or disproved scientifically.

However occasionally, some verses make claims that lend themselves to appraisal for scientific compatibility. Most of those from the Koran and a few from the Bible are listed below.

Though Tobin and others have extracted numerous faults, one must bear in mind the Bible doesn't claim to be the infallible word of God, but a Divinely *inspired* revelation describing events that occurred decades or even centuries before, written by numerous authors about whom we know next to nothing. We aren't even sure who compiled or edited them.

The only thing we know for certain is that all the originals have been lost; also little doubt remains that the Bible is not an exact copy of the original. Numerous faults have developed in the last few centuries even in the age of the printing press.

This chapter demonstrates beyond reasonable doubt that the Scriptures were not composed by assorted self-motivated scribes, who hit on a winning philosophy by chance and made numerous correct guesses on the workings of the Universe.

Subjects are divided into cosmology, earth science, and history. (Quotes from the Koran are in bold; from the Bible bold italics.)

Creation

21:30 Are unbelievers unaware that the Heavens and earth were one solid mass which We tore asunder, and that We made every living thing of water?

The tearing of the solid mass refers to the act of Creation. The mundane interpretation is that the universe at its present size was one solid mass, which was then torn apart and moulded into its present form. This is of course totally incompatible with evidence.

However an alternative interpretation agrees perfectly with the big bang theory. The Universe, initially concentrated in a tiny volume of infinite density, exploded or was "torn asunder" to its present size. (The latest postulate from Quantum theory says that at the instant of big bang the total mass and energy of the Universe was concentrated in a sphere with a diameter of about one metre).

The Koran is written in understatement, which is appropriate with the almighty powers of God and the vast forces and dimensions of the Universe, otherwise most descriptions would soon be overcome with adjective overload. The phrase "one solid mass" readily describes the infinite dense state of the initial Universe, and "We tore asunder" the greatest explosion of energy and space that has ever occurred or is conceivable.

One can hardly imagine a more accurate description that is scientifically correct, succinct, and at the same time conforms to the culture of the age it was written. Remember the objective of such statements is *not* to prove Divine authorship.

Of exceptional significance is the fact that this description of Creation is extremely counterintuitive. It differs fundamentally from every other account in the numerous religions that preceded or followed. It is difficult to imagine what could be gained by such a claim if fabricated. It serves no purpose, conveys no benefit to the faith, and goes out unnecessarily on a limb exposing itself to future assessment. Furthermore emphasis on the singularity of "one" is again significant. The description is astoundingly prescient.

Compare this with most other religions, where descriptions of Creation have a very topical flavour. The gods, having created the Universe, develop an extraordinary partiality to the local tribe, settle down in the adjoining mountains or jungle, rapidly lose their cosmic perspective and develop an amazing parochial tribal-centric one. (Other perennial favourites are celestial objects: the Sun worshipped by Aryans as Mithra; by Egyptians as Ra, Greco-Romans as Apollo and Helios, by the Norse as Freya, also by Incas, Aztecs, Sumerians, Hindus, and Japanese).

In contrast to these, the verse is scientifically accurate, concise, specific, and uniquely compatible with current cosmology. From the 7th Century up till the last few decades, it presented a very strange depiction of Creation, but for the last fourteen centuries has been much closer to the truth than anything science had to offer.

The big bang theory was first proposed by a Catholic priest (in 1927 Monsignor Georges Lemaître who was also a physicist). Evidence for the big bang was eventually observed in the 1960s, but was denied till recently by eminent physicists like Hawking and Fred Hoyle, who coined the term "big bang" in derision.

The probability for such an unusual description of Creation to have been fabricated and *not* turn out to be totally wrong is remotely low. The probability that such a wild guess should turn out to be flawlessly compatible with scientific evidence is even less.

Romans and Persians considered Arabians of the 7th century uneducated and unsophisticated, (the word Bedouin derives from the word "badavi" or "primitive"; "badv" means prime). The chances of their guessing the correct nature of Creation was extremely low, not conclusively but very significantly so.

Time of Creation

10:03 Who in six days created the Heavens and earth...

The word "day" has been a perpetual source of misunderstanding and scepticism. Clarification is necessary. According to current scientific evidence, the earth was formed about four and a half billion years ago and began to orbit the sun just as its nuclear fires was beginning to heat up properly. The age of the Universe is estimated at about thirteen billion years. For two thirds of that, neither Earth nor Sun existed, thus there were no days.

The actual duration of the day has also changed considerably during this time. For example, Earth was hit by an object the size of Mars (causing a big chunk to separate from it, which became the Moon). This impact dramatically changed the rate of spin and duration of the day. Even now it is constantly changing, decreasing every day due to friction with the atmosphere and magnetic forces.

All depends on the prevailing definition of the word day. The Bible gives a definition:

Genesis 1:5 "God called the light Day, and the darkness he called Night."

The Bible gives this description of the first day of Creation, before the earth or the Heavens were created. Thus clearly the Bible definition of day is not the same as that today.

Genesis 1:3 And there was evening and morning, one day.

By its own account on Day 1 only light had been created without the Sun or Earth. Since there was no rotation or periodicity to govern the duration of the day and since neither Sun nor Earth had been created, by its own definition "day" can only be considered at this stage to have an unknown duration.

One cannot place much emphasis on the literal interpretation of a twenty-four hour day, which many persist in doing and which has been a great source of confusion.

The Aramaic term for day "Yom" is the same in Hebrew and Arabic and was also used to denote a period of time. (The Aramaic language had very limited vocabulary).

The Bible process of creation is described as follows:

- Period 1: Creation of light.
- Period 2: Creation of the firmament.
- Period 3: Creation of earth, the seas, vegetation.

- Period 4: Creation of Sun, Moon, stars, day, seasons.
- Period 5: Creation of living creatures from the sea, birds.
- Period 6: Creation of more creatures on the earth, man.

Considerable significance derives from the above order, which is an amazing approximation of the current scientific version of the creation of the universe and the evolution of life.

The probability that all this was a series of lucky guesses is again extremely low. Compare this with every other version of creation fervently believed in antiquity involving cosmic cows or Atlas holding the world up on his shoulders.

If the creation of vegetation and trees were moved from the third period to the fourth, then the six stages of creation would become a perfect fit with the modern scientific version.

It is extraordinarily how the significance of this astonishingly accurate description of creation is so little appreciated. The average nominal Christian generally thinks that the Bible description of Creation is wildly incompatible with science, whereas in fact it is astonishingly accurate, especially since Indeterminacy doesn't allow total congruence. The reputable science magazine New Scientist called in "barking mad."

Period 1: Creation of Light

Genesis 1:3 And God said "Let there be light."

In the modern big bang version of creation, the first entity to be created was energy in the form of photons. Initially the photons were ultra short-wave cosmic or gamma radiation, rather than visible light. Very soon after, neutrinos, antineutrinos, electrons and positrons were also formed. The vast majority of these matter and anti-matter pairs annihilated themselves forming even more photons. This continued for the first half hour.

For each nuclear particle, there were about a billion photons. Thus the description in the above verse accurately describes 99.999999% of the content of the initial universe. Since there were no words to describe the particles that made up the remaining 0.0000001%, the Bible description is astoundingly precise and prescient.

Some may quibble that light is only part of the electromagnetic spectrum in the visible spectrum. This didn't predominate till much later, when the universe had expanded and cooled sufficiently. But Genesis couldn't say, "Let there be ultrashort wave gamma rays", or "Let there be photons"; the words didn't exist till the 1920s.

It is of great significance that this depiction of the Creation of the universe, in four words "Let there be light" could not have been more succinct and accurate in any age, let alone at the infancy of civilization over four thousand years ago. It is the most accurate and concise description that could have been written in the

Bronze Age or any other age, that perfectly agrees with modern physics. Consider the truly astonishingly counterintuitive description, in which light was created before the sun or even the sky. It is breathtakingly accurate and counterintuitive. Unlike every other description from antiquity, it is totally devoid of any cultural component.

The big bang theory has gained acceptance only in the last few decades. Actual physical evidence for it has been detected from the uniform expansion of the Universe and the detection of the remnant rumbling of the initial explosion, the microwave cosmic background radiation, whose temperature equivalent is now 2.7 Kelvin, down from its initial trillions.

In the thousands of years since these words were written, only in the last few decades has its compatibility with astronomical evidence become apparent. Compare the Bible version of Creation with all the other versions from antiquity. But they haven't all been totally without benefit for science, because they have proven invaluable in dour books on cosmology by Hawking and Weinberg, as a much needed source of comic relief.

The clear distinction that light was formed before the creation of the firmament or sky is mind boggling. Top physicists such as Fred Hoyle in the 1960s and Stephen Hawking in the 1990s didn't even accept the big bang theory despite the evidence, and believed instead in a "steady state" universe with no beginning. The same science that refutes the majority of ethnic and regional versions of Creation is strangely in perfect agreement with these descriptions in the Scriptures. The fact that they are not contradicted is miraculous. Of the hundreds of concocted versions of Creation, the Scriptures give the only compatible one; a probability of one in a million.

Period 2: Creation of the Firmament

Period 1 depicts the creation of light, or energy. This existed of course within the dimensions of the newly created space-time.

Period 2 describes the expansion of space-time from its tiny initial volume, or singularity, to roughly the scale of the present universe. Space-time is the combination of the four major inseparable dimensions that make up the universe. According to the Inflation theory, for which there is still no direct evidence unlike the big bang, space-time expanded rapidly from its initial small size to roughly its present scale in a flash. (N.B. the rate of passage of time may have been different then, but strangely this is not considered or accounted for in calculations in astronomy; discussed further in Appendix 2).

The duration of Period 1, the creation of light, is an instant or more accurately a Planck epoch (trillionths of a second). Its expansion was and still is at the speed of light. The duration of Period 2, the creation of the firmament, was a blink (milliseconds). Its speed of expansion or inflation was much greater than the speed of light.

After creation of energy and inflationary expansion, the universe gradually cooled from a state of hot ionised plasma, allowing the formation of hydrogen atoms, which coalesced through gravity into massive bodies initiating nuclear fusion at the cores giving birth to stars emitting heat and light. No stars were formed for several hundred million years. For the first several hundred thousand years, the universe would have looked empty though white hot.

The scientific version of Creation agrees stunningly with Genesis, which depicts initially the creation of light, and makes the truly astonishing distinction of the creation of a firmament full of light but without any stars or sun or any other light source.

However, Genesis then goes on to say that before the firmament was created, there was water, which is of course totally incompatible with the science.

Genesis 1:6 And God said, "Let there be a firmament in the midst of the waters, and let it separate the waters from the waters." And God made the firmament and separated the waters, which were under the firmament from the waters, which were above the firmament. And it was so. And God called the firmament Heaven.

This description appears quaint, confusing, and false. However a simple interpretation transforms the verse to astonishing compatibility with science. Let's consider both interpretations:

The Mundane Interpretation

1:2 And the earth was without form, and void; and darkness was upon the face of the deep. And the Spirit of God moved upon the face of the waters.

Initially there was no dry land. There was only the seas and total darkness.

- 1:3 And God said, Let there be light: and there was light.
- 1:6 And God said, "Let there be a firmament in the midst of the waters, and let it separate the waters from the waters."
- 1:7 And God made the firmament and separated the waters, which were under the firmament from the waters, which were above the firmament. And it was so. And God called the firmament Heaven.

Light is created then the sky is created inside the sea, submerged below its surface, which then causes a division of the waters into the lower part, the seas, and an upper part above, the sky.

However, there are clear clues that this mundane interpretation is not the intended meaning.

The strange separation of the waters into a lower part, the seas, and an upper part the sky, the source of rain, is presumably based on the blue colour of the sky as well as the sea. There is no precedence for such a concept in other cultures.

It is unnatural to imagine a huge body of water suspended in the sky. It must have been observed that it never rained from blue skies but only from clouds. Blue skies were synonymous with dry weather and no rain. It doesn't lend itself to an immature association of a vast suspended ocean of water hanging in the sky, just because it is blue. It must have been obvious and clearly visible that rains fall from clouds while nothing precipitates from the clear skies above the clouds. While rain may be an occasional nuisance these days, it was a matter of life and death in desert climates and keenly observed.

Verse 1 says in the beginning God created the heaven and the earth, but no mention of the creation of seas, whereas the earth, sun, moon, etc are all specifically mentioned. If the waters mentioned in verse 2 are the seas, then why is there absolutely no mention of their creation? It is totally counterintuitive and illogical to say the seas were created before the earth, sun, the sky, or light. Not to have mentioned their creation greatly increases the probability that it does not imply a suspended sea in the sky.

In the mundane interpretation, the seas existed before the earth or sky, which must have seemed strange even then. The mundane sea interpretation is then contradicted in verse 9:

1:9 And God said, Let the waters under the heaven be gathered unto one place, and let the dry land appear; and it was so.

No mention was made that the waters in the sky were separated or in various places. This demonstrates considerable confusion and a remarkable lack of coherence in a very simple description of only nine short verses. If everything had been covered by water initially, and there was no dry land, how can all the waters be gathered in one place causing the appearance of dry land? In the mundane interpretation, verse 9 should have said "let the lower waters be gathered unto one place" since the divided body of waters existed in two places, the upper part in the sky and the lower part in the seas.

The Alternative Interpretation

The same account of Creation makes absolutely perfect sense and becomes stunningly accurate when a very small allowance is made for the limited vocabulary of Bronze Age Aramaic. With the reasonable substitution of a single word, the description becomes astonishingly prescient and accurate. By replacing the word "waters" with "space" the absurd description becomes amazingly correct, succinct, and scientifically accurate.

Such a substitution is not unreasonable as there was no word for space. The closest analogy for space was the most ubiquitous fluid medium, water. Still air was not considered a medium, but was considered empty space. The concept of empty space or vacuum was not appreciated till the modern era. Many centuries later, Aristotle defined wind to be one of the four basic elements, not air, which was considered devoid of substance.

Replacing "waters" with "space" the verse becomes extremely accurate. With this simple substitution, the new interpretation of Genesis then becomes:

1:1 In the beginning God created the heaven and the earth.

God created everything at a particular time, the beginning. The important distinction is made that the process of creation is not a continuous affair, fully conforming to current cosmology.

1:2 And the earth was without form, and void; and darkness was upon the face of the deep. And the Spirit of God moved upon the face of the waters.

In the American Bible version: darkness covered the abyss, while a mighty wind swept over the waters.

Earth did not exist. Darkness upon the face of the deep or abyss refers to the profound nothingness that existed before the big bang, before even empty space itself had been created.

A mighty wind swept over space; remember that absolutely nothing had been created yet. This mighty wind sweeping over space readily alludes to the inflationary expansion of space. It was the only thing that was "sweeping" in Period 2. The degree of compatibility is astonishing and extremely counterintuitive.

This is not a heads or tails affair with a 50% chance for a correct guess. The probability for such a weird description to turn out to be true is remote, one in millions.

1:3 And God said, Let there be light: and there was light.

This has already been discussed in detail. Light was the first entity to be created essentially simultaneously with space-time.

1:4 And God saw the light, that it was good: and God divided the light from the darkness.

At first the whole of space would have been shining intensely due to the concentration of photons, but after three hundred thousand years, space began to emerge from a uniform state of opaque light, like bright clouds, to its present state of hot shining stars in a dark background.

Another interpretation is that initially the concentration of photons was so great that the universe was as luminous as an incandescent filament. Nowhere was dark, as opposed to the instant before the big bang, where nowhere was light. As the verses describe, initially there was total darkness (on the face of the deep), then total light (with the creation of light), then expansion of the universe (a mighty wind sweeping space), then separation of light and darkness (cool dark space with hot shining stars).

Replacement of a single word has produced an extremely accurate account fully compatible with modern astronomy.

1:5 And God called the light Day, and the darkness he called Night. The evening and the morning were the first day.

This clearly shows the definition of day is different from its present meaning, since by its own account the Sun and Earth had yet to be created and there was no periodicity of any sort.

1:6 And God said, Let there be a firmament in the midst of the waters, and let it divide the waters from the waters.

The absolutely astonishing distinction is made of the formation of a firmament after the creation of space itself. It's fairly obvious the author did not mean the formation of stars spattered on the underside of an aqueous ocean suspended in the sky.

It is incredibly counterintuitive to say that space was created before the firmament. Even after this distinction was made by Relativity four thousand years later scepticism persisted.

"Let it divide the waters from the waters" refers to the separation of different spaces-times each composed of differing dimensions. In other words, the space that existed before the big bang, about which we know nothing, was separated from the four dimensioned space-time we do know about. The compatibility with modern evidence based cosmology is truly astonishing; the claim that this is yet another amazing coincidence strains credibility.

There are clear clues that the mundane interpretation is not the intended one. The term used in the substitution didn't exist at the time and its concept was unknown.

Any depiction can be made to appear plausible if sufficiently stretched, but one must emphasise that here there is remarkable scientific compatibility with only the slightest alteration. Remember that the indeterminacy law stipulates limited compatibility. How else could a divinely inspired revelation describe the process of Creation under the limitation of indeterminacy and at the same time be valid while remaining compatible with the culture and language of the age?

The simple substitution of the word "space" for "waters" converts a confusing but important account of Creation to one that perfectly agrees with the scientific version.

The next nearest word to describe space was "ether", which didn't exist in Aramaic and was used by the Greeks many centuries later.

The extraordinary concept that vacuous space is a component of creation was only recently discovered in the 20th Century and was utterly counterintuitive and unknown of at the time.

The Universe exists within the four macro-dimensioned space-time continuum. We know nothing about the nature of space outside this or the space that existed before the big bang except that it was most likely different, as inferred in the verse, the waters before and after.

Before the big bang, space-time properties were different to what existed after, which is exactly implied in the verse:

Genesis 1:6 And God made the firmament, and separated the waters, which were under the firmament, from the waters, which were above the firmament.

Empty space or vacuum is not as empty as it seems; it is an energy field, a taut stretched four dimensioned fabric of space-time, where mass and energy spontaneously form and decay into each other.

The Koran refers to "waters" in exactly the same way:

11:07 Throned above the waters, He created the heavens and earth in six days.

If "waters" is referring to the sea, it sounds extremely odd even for the time it was written, implying the seas were created before the heavens or earth; a very unlikely interpretation.

But if the meaning is space, again it becomes extremely coherent and accurate: throned above the waters means with total control of the space-time that existed before our universe. He created the heavens and earth in the present universe.

Further on the accuracy of the Bible

Though there can be little doubt that considerable changes have been made to the Bible, one can still discern parts of the original, awe-inspiringly shining through the accumulated crust of deliberate or unintended alterations. In evaluating the Bible, allowance should be made for corruption, intentional or otherwise.

Not every word should be taken literally, because one can't be sure which parts are original and which are altered. For example, medieval translation mistakenly depicted horns on Moses' head as he came down the mountain; the error was set in stone by Michelangelo.

Blatant examples of corruption can be seen in Ethiopian Bibles. Ethiopia was among the first countries to embrace Christianity and has a long proud Christian heritage. (Circumstantial evidence suggests remnants of the Ark of the Covenant may still reside or at least may have resided there at some time). Yet the great twelfth century Ethiopian king Lallibella had the New Testament rewritten to include passages where Jesus says pilgrimage to Lallibella's unique churches, which he had carved into the mountains (UNESCO world heritage sites) is equivalent to pilgrimage to Jesus' tomb in Jerusalem; also that the king's capital in Ethiopia is blessed land, etc. These appear only in Ethiopian Bibles. The churches were carved eleven centuries after Christ, yet this version of the Bible is still believed authentic, and the king's shrine is a revered pilgrimage site today.

In appraising the Bible, one should not underestimate the capacity or propensity of humans to fabricate or corrupt where there is political or material gain, especially if they can get away with it.

There is incontrovertible evidence of considerable alteration made through the ages to other scriptures with political motives, including the Avesta and Vedic scriptures. But unlike these, the undeniable power of the original Bible can still be perceived.

Summary

Substituting the words "space" for "waters" and "period" for "day" gives an astonishing and incomparably accurate description of Creation, unlike every other absurd version from antiquity. This considerably increases the probability of authenticity.

To appreciate this better, one should try to adopt the perspective of Bronze Age authors with their very limited knowledge. In any lay conjectural account of Creation, one would expect the Sun to be created first, then perhaps Earth and Moon, followed by the stars; or perhaps Earth could come first, followed by the Sun and Moon.

It is absolutely counterintuitive to state light was created first, without the sun, then a "mighty wind" sweeping over the face of space, the inflationary expansion of space, then formation of an empty firmament, the sky, and then the Sun, stars, and Earth.

It had appeared self evident, up till the beginning of the 20th century, that infinite space had always existed. How could it be otherwise? What existed beyond a hypothetical boundary of a finite universe? How could anyone have doubted this? It was only in the 20th century that mankind, bewildered by Relativity, realised that empty space itself can be created, exactly as implied in Genesis.

Neither space nor time, as we know it, existed 14 billion years ago. Other shocks are that time can be readily slowed down (almost stopped), space can be bent; mass and energy are different interchangeable manifestations of the same thing.

One cannot overstress the significance of the distinction made that after the creation of light an empty firmament was created, implying correctly the creation of space itself. Intuitively infinite space and time had always existed.

The verse totally agrees with current cosmology, an initial explosion of energy, then the vast firmament (space-time), a mighty wind (inflationary expansion), then the cooling of the intense light into dark space and the formation of stars.

The Avesta, which preceded the Bible by millennia, also gives prominence to light as the main component in the first stage of Creation, but the rest of the account has little compatibility with science. Due to similarities with the Bible, it's possible that it too may have originally been a divinely inspired revelation. Similarities between key concepts in the Avesta and Bible have led secular historians to speculate that the authors of the Bible were inspired by Zoroastrianism. Theists can counter they all could have been inspired by the same source.

The probability of guessing that the first item of creation was (a) light, then (b) the firmament, then (c) the celestial bodies, is extremely low. This unique account is astonishingly compatible with evidence. Compare it to the myriad versions from antiquity, which all had strong cultural components. Compare this theory, emanating from the tiny Israelite tribes, with the more recent theory from the much more populous and advanced Indian civilization, with its very rich cultural and scientific history, where one of the Hindu gods responsible for Creation has an elephant head on a four armed human torso, is embellished with beads and bracelets, is depicted transfixed in a dancing pose, needs to be sustained with milk, and its attention is drawn by ringing a bell.

Period 3: Creation of Earth, the seas, vegetation and trees

Genesis 1:9 And God said, "Let the waters under the Heavens be gathered together into one place, and let the dry land appear."

Here water is clearly meant in the conventional sense; deduced by contrasting its nature with dry land. One can speculate that the early scribes may have confused whatever term was previously used to depict medium or space in preceding verses; then seeing the reference to conventional water here, considered it to be a continuation of the previous terms.

As the verse implies, Earth acquired its water from space; another extremely counter intuitive claim. Water is a major constituent of comets, from which Earth acquired all its water from impacts. Water was initially formed in space, as depicted and implied in the verse.

Let the dry land appear. This depicts the formation of Proto-earth; an agglomeration of supernova debris (star dust) and comet ice. Heat from asteroid impacts and radioactive decay caused the planet to melt; the heavier iron sinking to the core, the lighter minerals floating to the upper layers, while lightest of all, the gases and water vapour accumulated at the surface. On cooling, the surface turned into a solid mantle crust of dry land.

Cooled vapours liquefied to water, precipitated in the first rains, coalesced to form the seas, while other vapours remained in the gaseous state. Again the verse is fully compatible with the modern scientific account, in which dry land and the sea formed in the early stages of the earth's existence. The formation of water preceded the formation of the earth, as clearly inferred in the verse. During the eight billion years before the creation of Earth, water was continuously formed in space.

A second totally compatible interpretation of "gathering the waters under the Heavens" could describe the cooling and condensation of the water vapours in the atmosphere, or lower heavens, and their gathering together in the first rains to form the first seas.

Genesis 1:11 And God said "Let the earth put forth vegetation, plants yielding seed, and fruit trees bearing fruit in which is their seed, each according to its own kinds, upon the earth." And it was so.

Again almost in perfect agreement with scientific knowledge, the chronological Genesis account is:

- 1) Water is formed (from hydrogen, the most abundant element in the universe, reacting with oxygen formed from fusion reactions in supernovas.)
- 2) Earth is formed (from remnants of supernova explosions).
- 3) Water reaches the earth's surface (via comets and retained by earth's gravity).
- 4) Vegetative life forms appear as single cell life-forms that mutate to algae. (The first single-cell life-forms appeared 3.5 billion years ago, and the first multi-cells 3 billion years later.)
- 5) Seed bearing plants formed. A tremendous development of plants occurred after the momentous transformation to multi-cell species.
- 6) Fruit bearing plants and trees appear, in a numerous variety of species. Fruits developed as an evolutionary refinement of the plain seed production process, by providing a nutrient and protective coating to the seeds. Later flowers formed, assisting the propagation of seeds by utilizing the greater mobility of insects and birds for dissemination and pollination.

All are in remarkable agreement with evidence. Correct distinction has been made in the order of Creation; firstly basic vegetation, now believed to have been algae, then seed yielding plants, followed by fruit bearing plants.

Compare this with what sophisticated Greeks and Romans literally believed; despite their numerous brilliant philosophers, intellectuals, and engineers, for a period of five or six centuries (two thousand years after Genesis) they believed the world was held up on the shoulder of Atlas (never mind what he was standing on) was created by Zeus, who with a plethora of other gods residing on the top of Mount Olympus, wore tunics and togas, regularly squabbled and fought among themselves, behaving surprisingly similar to the Romans and Greeks themselves.

One can hardly suppose that they actually believed all this or took it seriously but they tortured to death those who didn't or refused to eat flesh sacrificed to Apollo.

Note the geographic topicality of the residence of the gods on Mount Olympus, ditto Hindu gods in Indian jungles, ditto South American Natives gods on the Andes. (One wonders if anyone actually ventured to those mountain tops, to see if they could catch a glimpse of the gods going about their daily business.)

These zero compatibility theories contrast with the Genesis version, which with slight modification has astonishing compatibility, though written millennia before.

Period 4: Creation of the sun and moon and stars, the day and night, and the seasons

Genesis 1:14 to 18. And God said, "Let there be lights in the firmament of the Heavens to separate the day from the night; and let them be for signs and for the seasons and for days and years, and let them be lights in the firmament of the Heavens to give light upon the earth." And it was so.

And God made the two great lights, the greater to rule the day, and the lesser to rule the night; he made the stars also. And God set them in the firmament of the Heavens to give light upon the earth, to rule over the day and over the night, and to separate the light from the darkness.

Even in the Bronze Age it should have seemed somewhat odd that vegetation, trees, and fruit bearing plants were created and grown in total darkness (over a period of about 500 million years before the Sun was created).

Conjecture should be avoided, but it's possible the order of days were later changed; perhaps the early scribes considered Earth to be more important than the Sun in the order of creation, necessitating the correction of an oversight.

If Day 3 were swapped with Day 4, complete compatibility with the scientific version results. The chronological order for the biblical process of Creation, its development from the big bang to the creation of man, would then agree perfectly with scientific evidence.

A significant pattern clearly becomes apparent: the Bible version of Creation is remarkably close to the scientific version, but with some slight modifications becomes amazingly so. Indeterminacy precludes a flawlessly accurate depiction of Creation; thus some discrepancy is necessary, but the degree of compatibility with science is still very significant.

Period 5. Creation of living creatures of the sea and birds

Genesis 1:20 And God said, "Let the waters bring forth swarms of living creatures, and let birds fly above the earth across the firmament of the Heavens."

As the verse implies, life started in the seas. Again this is totally counterintuitive, unique, and very accurate.

The probability for its correct guess is again extremely low. This depiction appears in no other cultural or religious history on how life began. It was far from obvious that life started in the seas.

The emphasis on the variety and abundance of sea life by use of the word "swarms" is also significant. In the Bronze Age, only a tiny fraction of sea life would have been known, but we now know of the enormous variety there is and the immensely greater variety that previously existed, most of which has become extinct. Abundance and variety of life would intuitively appear to be much greater on land.

Some fish species began venturing on land, adapting in the process. The prevalent theory is that from this fish species, all land animals developed. (Later a sort of weasel species gradually ventured back into the water to hunt fish, developing into sea mammals, dolphins, seals, sea lions etc).

The general consensus is that birds did not descend directly from fish, nor develop parallel with them, as suggested by the verse, (disregarding flying fish). Birds are considered to have developed from dinosaurs or other land creatures, though this may change. If not, it would be more accurate if the creation of the birds were to be moved from Day 5 to Day 6, i.e. the sixth period of the creation.

Period 6. Creation of land animals and man

Genesis 1:24 And God said, "Let the earth bring forth living creatures according to their kinds; cattle and creeping things and beasts of the earth according to their kind." Describing the final stage of creation, we lose some of the accuracy and clarity of previous verses. All land animals are described as "cattle, creeping things and beasts." The description has taken a rustic turn, adopting a more limited scope of the animal kingdom, mentioning cattle first, then "creeping things and beasts" to depict all others. This may be attributed to the increased propensity of humans to add their opinion in subjects they are more familiar with. Or it may be deemed sufficient to describe the animal kingdom simply with the perspective of the age, making it easier to relate to and understand.

Of extreme significance is the wording of the verse, which says: "Let the earth bring forth living creatures..." It would have been much more intuitive to say: "Then God created all the animals" implying animals were created in the form we see them now, which is exactly what was believed from antiquity till the mid nineteenth century.

But surprisingly, the wording in the above verse doesn't say that at all, but instead is specifically written in such a way to be fully compatible with the evolution of species. Remarkably, it doesn't say animal species were created in their present form, but rather they developed from the earth, which clearly implies evolution. Secular criticism of the Scriptures for opposing evidence of Darwinian evolution is barking up the wrong tree.

The overall accuracy of the sequence of Creation is extremely significant, yet generally little appreciated.

Genesis 1:30 "And to every beast of the earth, and to every bird of the air, and to everything that creeps on the earth, everything that has the breath of life, I have given every green plant for food."

Ignoring the odd division of life forms, the verse fully concurs with evidence. All land animals and birds depend directly or indirectly on vegetation for food. The description could easily have been worded differently, especially since carnivores were well known. The fact is all land animals depend directly or indirectly on vegetation for food. Vegetation is at the bottom of the food and energy chain, deriving its energy directly from sunlight.

Some may say microbes and enzymes are even lower on the food chain but technically these don't really count as "breathing animals" (some bacteria are anaerobic). They assist roots in fixing nutrients from the soil. Besides, they are not fed on by vegetation, but are utilized by them. Also they were unknown at the time, so could not have been specifically referred to.

It was not obvious that all land animals depend on vegetation. Knowledge on the subject was extremely limited. There was little basis to infer such a sweeping statement. For all they knew, there may well have been other fundamentally different food sources.

Some life forms at the bottom of oceans derive their energy and food not from vegetation or the Sun, but from hot sulphur-rich vents. *Intriguingly, the verse specifically doesn't include these, referring only to land animals.*

Moving from Genesis to the Koran and beginning with astronomy:

56:75 I swear by the shelters of the stars, a mighty oath if you but knew it, that this is a glorious Koran.

From antiquity, the Sun was worshipped as the greatest physical entity after Earth, followed by Moon, planets, and stars; based perhaps on the assumption of their equidistance to Earth. The least of the heavenly bodies were the fickle stars, paling beside the Moon, and easily set to flight daily by the Sun long before it ascends the horizon.

Counter to all cultural values through the ages, not only are the stars in this verse given more importance than the Sun, but surprisingly the greatest importance of all is bestowed on the "shelter" of the stars, (some translations say "setting "). A very novel and strange concept indeed is presented here. The Koran doesn't aggrandize the Sun, Moon, planets, or stars, even though these had been highly considered in all cultures and religions, and still were very much so in the Arabian Peninsula.

Considering the uniform tone of understatement in the Koran, there is pronounced significance in assigning enormous importance on what was previously considered a minor celestial player. For centuries the verse must have seemed very mystical and obscure. No other reference is made or any explanation given. The Koran again appears to have gone out on a limb unnecessarily.

What could be meant by "setting of the stars" which has such immense magnitude? The simplest explanation is the daily setting of the stars at dawn, but this is incompatible with "a mighty oath if you but knew it" because firstly, it would describe the daily waning of the stars in the morning light. Secondly it was a common daily event, so would not be an unknown concept as inferred in the phrase "if you but knew it."

It alludes to the final setting or extinguishment of stars, though from the 7th till the 20th century, there was absolutely no reason to doubt that stars shine for ever.

It lends itself to no other interpretation. The verse then lights up with meaning, though is still sufficiently vague not to be too obvious.

Final "setting" implies the onset of death. When this occurs, stars larger than three solar masses become supernovas, which produce more light than all the hundred billion stars of a galaxy put together. These are the greatest and most awesome explosions in the universe. At a distance of a hundred million light years, (about one percent the diameter of the Universe) a supernova can obliterate all life on earth.

The explosion is so great that at their core, supernovas crush space, mass, and time out of existence into the enigmatic singularity of a black hole. At the centre of many galaxies, including ours, super-massive black holes exist with the mass of billions of Suns.

The explosion of supernovas and the tremendous implosion of stellar material into black holes, both final settings of stars, portray the most spectacular and awesome events in the history of the universe. Nothing greater can even be imagined.

The setting or death of stars that lead to supernovas, neutron stars, red dwarfs, or black holes, awesome by any measure, are the greatest events in the universe, commensurate with the extraordinary and otherwise inexplicable emphasis given by "a mighty oath."

Until a few decades ago no one would have known anything whatsoever about it, as implied by "if you but knew it."

The notion that stars die and do so with tremendous violence is extremely counterintuitive to say the least. The probability of such a strange claim being guessed at and turning out to be perfectly correct is again extremely remote. There is essentially no other interpretation for the verse.

65:12 It is God who created seven Heavens, and earths as many.

The most likely interpretation of "earths" has to be planets. In antiquity the seven heavenly bodies were the five visible planets, Sun and Moon. It is unlikely that these are meant; otherwise they would not be described as "earths" but as heavenly bodies. If these were included, it would have said there are eight earths.

It is very significant that Earth is considered, not the fixed, flat stationary centre of the universe as generally believed in the West until the seventeenth century, but a celestial body similar to the planets, and by implication an orbiting body like them.

Heraclites also believed the earth was similar to the planets, but hundreds of other theories of every description existed in antiquity describing the structure of the Heavens, all of which were totally wrong. Each was as good as the other as far as anyone knew. (None were based on evidence; all were personal conjecture).

Anyway Heraclites' theory and myriad others were not known in the remote deserts of Arabia. Each locality was a world in itself, and no theory prevailed over any other.

From time immemorial until the eighteenth century, only the visible planets were known: Mars, Venus, Mercury, Jupiter and Saturn. They were often the brightest "stars" in the sky. Their location in the sky changed continually, unlike the rest of the stars that remained fixed relative to each other. (The word planet is from the Greek wanderer).

In antiquity seven celestial bodies were believed to orbit Earth; five planets, Sun, and Moon, but this is different to what is referred to here, because there are seven earths, not seven Heavenly bodies moving around the earth. The implication is that Earth is one of those bodies and there are six others like it.

It is very strange that the verse implies there are seven earths or by implication planets, because that is two more than the known number then, and one more if Earth itself is included. Nine planets are now generally recognized; the visible five from antiquity and Uranus, Neptune and Pluto, which were discovered after the telescope.

Some astronomers consider Pluto not to be a planet, as it is smaller than the moons of Jupiter and Saturn. Also it may be considered to be just one of the larger objects in the Kuiper belt, in which *millions* of similar objects orbit the Sun, called Kuiper Belt Objects, (KBO).

Most are smaller than Pluto, but some may be as large as Earth. In 2004 another large KBO was identified the size of Pluto. There may be many more like it.

Even if we discount Pluto, there are still eight planets to be accounted for. Seven is one more than the known number then and one less than the known number today.

Speculating on the word "earths", if we define them as large bodies orbiting the sun, there are millions of them. What essential feature defines "earths" that would exclude numerous moons and millions of KBOs, comets, and asteroids? Orbiting the sun is an unsuitable parameter; it would include millions of objects.

Size is also an unsuitable parameter, requiring an arbitrary cut off point. Orbit diameter is also unsuitable, requiring another arbitrary cut off point. Other unsuitable parameters are temperature and colour.

One specific interpretation that could eliminate the millions of bodies orbiting the Sun and not require arbitrary parameters or cut off limits is atmosphere, i.e. those most resembling earth. This would then give the correct seven because Mercury has no atmosphere.

This definition conveniently discounts the millions of KBOs orbiting the sun. Ambiguity will remain until a clearer definition of "earths" is found. Delving further becomes too conjectural, which is unlikely to bring a satisfactory resolution.

But of great significance is the extraordinary claim that there were more than the recognised five planets. Five were known from prehistory due to their clear visibility, whereas it was and still is impossible to see Neptune and Uranus with the naked eye.

There was no reason to suspect there could have been more planets, nor was this mentioned in any other account from antiquity; a bold statement that has become conditionally justified.

21:33 It was He Who created the night and the day, the sun and the moon: each moves swiftly in an orbit of its own.

The interpretation of "orbit" refers to the trajectories of the sun and moon around the earth, but the accompanying adjective used to describe their movement "swiftly" is unusual especially considering the general tone of understatement.

Their movement could be more accurately described as slow, as they traverse the sky in twelve hours or so. To describe it as swift implies an appreciation of their great distances from us and their high speeds: 65 kilometres per second for the Moon in orbit around Earth, and 250 kilometres per second for the Sun around the galaxy.

The fact is the Sun *does* travel in an orbit of its own around the centre of the Galaxy, though this was not known till the last century; for all they knew at the time the Sun might well have been stationary.

Conversely if the implication was that the Sun is orbiting Earth, then the description of "swift" to describe the trajectory speed would be somewhat out of place, because since antiquity it was considered to be much closer to the earth than it actually is, hovering above the clouds (as witnessed by Icarus, who flew too close to it).

Also noteworthy is what was *not* said about their trajectories, such as Earth being at the centre of their orbits, or that the Sun is smaller than the earth, (the Sun and Moon appear to be the same size and intuitively smaller than the earth), or that they are close, or that the Earth is flat, or the centre of the Universe etc.

35:41 It is God Who keeps the Heavens and earth from falling. Should they fall, none can hold them back but He.

This appears quite obvious, not requiring much skill of observation. Isn't it evident the sky isn't falling? What is the point of stating the abundantly obvious? However, considerable significance exists in a supplementary meaning: the Universe is not contracting.

As usual, a mundane as well as an alternative interpretation exists.

The general red shift of galaxies shows the Universe is expanding rapidly (an exception is the blue shift from Andromeda which shows it is hurtling towards a collision with the Milky Way at 300 km/s).

It could so easily have been the opposite, i.e. the universe having expanded for billions of years has stopped expanding and is falling back on itself, pulled in by its own gravity towards a big crunch.

In a guess, there is as much probability that the sky is expanding as it is contracting. Another viable alternative is a stationary universe, neither expanding nor contracting, which further reduces the probability of a correct guess.

Physical data could very easily have contradicted the verse, as it does with practically every other ancient account, but significantly here it doesn't. (Not only is the universe expanding, but its rate of expansion is accelerating.)

Another interesting intrinsic implication in the verse is that Earth is *not* the centre of the universe as generally believed at the time and for centuries later, especially by Popes. The verse implies it too could be falling like other celestial objects (towards a big crunch).

It is much more intuitive to say the Heavens were prevented from falling onto the earth, not that both the Heavens and the earth were prevented from falling. Natural intuition is that the earth is stationary and the sky was prevented from falling onto it. The implication that both the Heavens and Earth might be falling is significantly unusual, counterintuitive, and thought provoking. What could they possibly fall onto? This no doubt has been a source of considerable confusion that could only be answered early in the 20th century (by Hubble).

Like many other verses, it fully agrees with available evidence. The universe is not contracting. The Earth as well as the sky could fall; yet the verse still lends itself to a mundane interpretation compatible with the age it was written. Nearly every theory in science from before the 17th Century has been refuted. Much of these could have easily become incorporated into the Scriptures, exposing them today as human fabrication. The long list of very improbable coincidences is significant, but by necessity must not be conclusive.

CHAPTER 5 A RATIONAL APPRAISAL: EARTH SCIENCES

79:32 After that He spread the earth, and drawing water from it's depth, brought forth it's pastures.

The verse implies a considerable source of water resided deep inside Earth. To adopt the prevailing perspective of the time, water clearly originated from clouds. They must have noticed rainfall raised water levels of wells and vice versa, clearly implying well water is replenished from rain. It would not be obvious or likely that the principle source of the earth's water was from deep in the earth.

The view today is that Earth got all its water from comets (they have the composition of dirty snowballs) or from asteroids (ice has been observed on some). The verse says the waters were drawn from deep in the earth, which is precisely what happened. As Earth heated up from asteroid impacts and radioactive decay, water floated to the surface. (Lakes of ice or water still exist deep under the surface of the Moon and Mars).

The critical word is "depth"; drawing water from shallow wells was common practice. The wording lends itself to greater depth than such wells. Aquifers were unknown. Remember the verse is describing a particular time in the early stage of Creation. Water emerging from the depths of the earth is a very accurate assertion, fully compatible with scientific evidence.

21:30 We made every living thing from water?

24:44 God created every beast from water.

An absolute prerequisite for any life form is water; no life form can exist without it. Wherever water exists, there is a considerable likelihood life can develop spontaneously. Without it, life as we know it is impossible.

Life flourishes at temperatures of thirty degrees below zero to 160 Centigrade. Life can thrive without air or oxygen, in total darkness, in acid and alkali, under the harsh conditions at the bottom of oceans, at immense pressures, and inside rocks, but no water, no life. The most indispensable ingredient for life is water. The claim that every living thing was made from water is accurate and succinct; no life form can exist without it. This fact is again somewhat counterintuitive.

For millennia it was widely believed that everything, including all life, was

composed of four elements: earth, wind, fire, and water (more conjectural tyranny from Aristotle whose authority was so great that the dogma reigned unchallenged up to the Renaissance. Chinese folk medicine is still based on it).

No other source in the 7th century proposed the critical role of water in life, from which the Koran could have borrowed. There was no reason for it to have occurred to anyone at the time. The chances of guessing this from all other possible concepts are low, but not so low as to prove Divine authorship.

It presents another example of the many claims in the Scriptures that were very counterintuitive but which under scientific scrutiny have turned out to be valid and accurate. The probabilities involved are consistently insufficient to prove conclusively the nature of the authorship, but high enough to be significant and thought provoking.

43:12 Who has created all living things in pairs...

Humans and animals obviously came in pairs, but to extrapolate this to everything in such a sweeping definitive statement is bold and strange. At the time it was written, what was the basis for such a claim? For centuries, the assertion must have been difficult to justify. Not only is this another case of an extremely counterintuitive claim, it borders on the indefensible.

Animals and humans coming in pairs, male and female, is fair enough, but what about non-sexual reproduction, such as bacteria and single cell organisms which come in single unisex form? But in uncanny agreement with the verse, these reproduce by dividing into pairs of identical twins; based on the *two* spiral helices of DNA, each of which separate in replication and pair with free floating amino acids to form a new pair of spiral helices.

If DNA had three helical strands, cells would reproduce in triplicate. But they don't; they form only in pairs. (In his memoirs, Watson says right up till a few days before their famous discovery, he and Crick were convinced from X-rays of the DNA crystal that it was composed of a triple spiral helix.)

All species are either bisexual or unisexual; no tri-sexual or multi-sexual species exist. (Two sexes are sufficient to supply the diversity in genes required in nature. More than two sexes would be extremely difficult, impractical, and unjustifiable; imparting little additional benefit in gene diversity for an exponential increase in complication of three way sex or pollination).

Large multi-celled species with long life spans mutate only very slowly, but sexual reproduction allows instant gene diversity. Single cell species have short life spans but mutate rapidly, crucial for adapting to changing environments. Bacteria reproduce asexually by division into pairs.

Both cases fully concur with the description. Though the process of sexual and asexual reproduction is profoundly different, the verse accurately and ingeniously describes the replication of both sexual and asexual life forms, all created in pairs.

51:49 All things We made in pairs, so that you may give thought.

But then what about "all things", inanimate objects, rock, earth, and water; are all these also created in pairs? To determine this, we have to go back to the basic building blocks of matter itself.

Soon after the big bang some energy was converted to mass, which took the form of equal amounts of matter and anti-matter. The only difference between them is their charge, which is reversed. For example, the counterpart to the electron is the positron, which has equal mass but positive charge. The two forms annihilate each other on contact, liberating a large amount of energy as photons. This is what is believed to have happened to the majority of matter and anti-matter that was created. The vast mass of the universe is the minute fraction of matter left over that by chance wasn't destroyed by its anti-matter counterpart. The reason for it is still unknown.

However, the fact remains that everything was made in pairs. Even photons are created in pairs, but since they don't have opposing charges, they don't annihilate each other and peacefully co-exist.

Until recently, such passages must have seemed dubious; yet another example of extremely counterintuitive claims that turn out to be astonishingly accurate, but in deference to indeterminacy never conclusively so, always maintaining a balanced compatibility between human and Divine authorship.

33:04 God has never put two hearts within one man's body.

A simple straightforward claim is made here. A mummified body from antiquity with two petrified hearts would contradict the verse. Medical science can assess whether two hearts are viable or possible in a single body. From any perspective it seems unlikely.

The giraffe, a most likely candidate for multiple hearts, has only one. Brontosaurus and other long necked Sauropods may have had several hearts; up to five have been proposed based on the assumption that they extended their necks vertically (though it is more likely that they extended their long necks only horizontally, for feeding over swamps perhaps, in which case it would not have been necessary to have multiple hearts.) However, the Giant Pacific Octopus has three hearts, which clearly shows nature is quite willing to form multiple hearts, opening the possibility, discounted by the Koran, that any human could have had two hearts.

A figurative and more pertinent interpretation is that no man has had, nor will have, two souls.

In such verses, both the literal and figurative interpretations hold, unless the verse is explicit in stressing its figurative meaning only. Generally in the Koran, where there are verses of dual meaning, both meanings may be assumed.

13: 03 He gave all plants their male and female parts.

All plants have male and female parts, but how obvious was it then? The plant which the Arabians had the most working knowledge was the date palm. To correctly extrapolate this to apply to millions of other species is another instance that pushes the limits of probability.

Initially, all life forms were asexual, replicating like single cell bacteria. The chance of survival of a single bacterium is not high, since it has no control over its environment and is incapable of moving to avoid threats.

Its survival strategy is to reproduce rapidly when nutrients are available in the hope that of the millions of copies, some will mutate to genes with traits more suited to thrive in that environment. In a harsh constantly changing environment, beneficial traits develop in a minority, which then develop preferentially. Many other mutations become dead ends.

This strategy works well at the micro level, but is excessively wasteful and inefficient at macro-levels. Cell division for microbes is in the order of minutes, whereas maturation and reproduction for larger life forms requires years, and mutations decades.

Bacteria can tolerate a high percentage of death, because those remaining have a better chance of survival and limited nutrients are more efficiently used by them for the benefit of the species.

In a hypothetically ideal environment with no shortage of nutrients, a single bacterium can reproduce a million tons of itself in a day.

Large organisms have developed a more efficient strategy for reproduction and gene diversification as the ratio of nutrients to biomass decreases dramatically as organisms increase in size.

A successful solution has been sexual reproduction, in which genes developed over considerable time is transferred instantly during mating or pollination, dispensing with the necessity of time-consuming internal mutations, and the immensely wasteful necessity of producing numerous variations that will not survive.

In sexual intercourse, genes are instantly transferred that impart diversification and survivability without the need for rapid internal mutations (which is impractical for large organisms). If the transferred genes are not suited to the environment, the offspring is less likely to survive. For the benefit of efficiency and refinement in this area, attributes such as brighter plumes, bigger antlers, and the sense of beauty gradually developed.

The same principles apply to plants, which like animals are multi-celled with relatively long life spans. Plants also benefit from the greater efficiency and gene diversification available through bisexual gene transfer.

To overcome their handicap in mobility, plants have developed other mechanisms for sexual gene exchange, pollination using the wind, insects, bats,

or birds, which are wooed with colourful and aromatic flowers, nectar, and fruit.

Some plant species are divided into male and female groups, while others are hermaphrodite, which have male and female parts on the same plant but all three types have male and female parts.

This was not obvious at the time of writing, nor was it fully appreciated till recently.

15:21 We let loose the fertilizing winds.

The most graphic examples of the fertilizing property of winds can be seen on the islands of Hawaii. These all formed initially as sterile heaps of hot basalt, the solidified slag from underwater volcanoes. Some are still growing today, forming barren new islands as the crusts break water level.

Yet Hawaii is among the lushest areas of the world with rich soil and myriad flora. The only contact these islands have had with the mainland six thousand kilometres away has been via the wind, which "fertilized" it with seeds. As a testimony to the fertilising properties of wind, from its harsh barren infertile beginnings, Hawaii has become among the most fertile places on earth.

Hay-fever sufferers are reluctant witnesses of the fertilising properties of wind, which carry pollen over thousands of kilometres.

Significant amounts of nitrate fertiliser are produced by lightning, which combines nitrogen and oxygen to nitrous oxides, spread by wind and deposited by rain. These properties could hardly have been obvious to desert dwellers, who must have noticed how barren the desert remains despite copious wind blowing over it; another example of a very counterintuitive claim turning out valid.

07:39 "These, Lord, are the men who led us astray. Let their punishment be doubled in Hell-fire." He will answer: "You shall all be doubly punished, though you may not know it."

The simple innocuous statement actually happens to have subtle mathematical overtones. Since the punishment of Hell is infinite, any multiple of it remains exactly the same; infinity multiplied by any number is still infinity. The concept of infinity and its mathematical properties were not fully appreciated at the time (still not fully today) as implied in the verse, but a subtle perception is alluded to it here.

29:41 Surely the spider's is the frailest of all dwellings, if they but knew it.

Of tens of millions of animal species, only a handful was known at the time. Despite innumerable species discovered since then of every conceivable type, size, and shape, there is still no dwelling that is frailer than the spider's.

There was no basis to extrapolate attributes of frailty of dwellings to all species. Again the probability of a correct guess is low. The degree of frailty of the spider web was not fully appreciated then (as implied in "if they but knew it"), perhaps still not generally so today.

If humans were reduced in size to spiders, the average weight of their dwelling would still be five million times greater than a spider's web.

A spider weighs twenty thousand times *more* than its dwelling, while humans weigh thousands of times *less*.

If the same weight ratio of spider to dwelling were maintained, the average human house would weigh 5 grams (the weight of a piece of paper). A similarly great ratio difference applies to all other species in comparison with the spider.

Again, another claim has been made that serves no purpose, goes out on a limb unnecessarily, yet turns out to be succinct and valid; following a pattern of compatibility with scientific data while lending itself to a mundane explanation to maintain a necessary degree of indeterminacy.

CHAPTER 6 A RATIONAL APPRAISAL: HISTORY

Historical Events

7:189 It was He Who created you from a single being.

2:213 Mankind were once one nation...

Evolution says humans are descended from ape-like primates. The Scriptures say that all mankind are descended from a common pair of ancestors, thus are all brothers and sisters, born equal in the sight of God. Not believing in the equality of humanity leads to racism, the attitude enshrined in the Constitution of the Confederacy of America, which solemnly proclaims: "We hold it to be self evident truths that the black man is inferior to the white." To uphold this amazing assertion, the Confederates fought a bitter civil war. They didn't say that they needed to subjugate the blacks temporarily as an economic necessity, or that they came from an incompatible culture or that slavery was actually legal at the time. They actually believed blacks were an inferior race, suited only for slavery; implying an intelligent black is inferior to a retarded white. This astonishing attitude was defended till the mid 19th Century.

There is abundant evidence that all humanity is genetically very similar despite great difference in appearances. A test conducted by the University of California of San Diego on gene diversity in humans and apes has yielded astonishing results: they found that the genetic variation of a single group of 55 chimpanzees living in a small part of the jungle in West Africa had twice the genetic diversity that exists between all six billion humans throughout the world.

In other words the tiny group of chimpanzees is genetically more diverse than the Aborigine is from a Swede, the black African from a Chinese, or any human from any other. To us chimps look all alike, but compared to them we are all identical.

From a scientific view the results are truly amazing. In the six million years humanoids split from them, chimpanzees have had considerably more evolutionary change, yet still appear to have changed or progressed so little compared to humans.

Humans have minute genetic diversity but have advanced tremendously, whereas chimps with enormously greater genetic diversity have barely changed in millions of years.

Genetic evidence (based on mitochondrial DNA) clearly shows that humans are all descended from a tiny group in the relatively recent past. Amazingly the more tests are done the smaller the number of this group becomes.

The secular explanation is that about 60,000 years ago some sort of calamity caused all but a tiny group of humans to perish. Evidence for such a global catastrophe has not been found. Even in a nuclear holocaust, numerous pockets of humanity would still survive in many areas of the world, though civilization would be destroyed.

Even great plagues such as the Black Death in Europe only killed a third of the population. A pandemic is unlikely, because humans were spread right across the earth and had little contact with each other over great distances. Had such an epidemic broken out, the time required to propagate around the globe would be many years, allowing gradual resistance. If this had happened, genetic or physical record of it would remain.

In such a catastrophe, the probability of survival of a tiny group that crossed the Red Sea from Africa into the Middle East must have been low, but how very convenient that it fits so perfectly with our theory. If this very unlikely scenario had not happened exactly as it did, genetic evidence would have contradicted the Adam and Eve scenario. Instead, all humanity including Neanderthals mysteriously died except for this tiny group.

By doing so, this extraordinarily improbable circumstance lends physical evidence both to natural evolution theory and human creation as depicted in the Scriptures, in perfect and very significant compliance with our theory.

The dual compatibility is truly astonishing; it is precisely what is required for full corroboration with the Scriptures and the principle of indeterminacy. If this group had not been the only survivor, physical evidence would have refuted the Adam and Eve theory.

If the size of the group could be calculated to less than ten, physical evidence supporting the theory would become too much, incompatible with the inviolable indeterminacy principle. A number of about two hundred, as calculated from mitochondria analysis, is just about right to lend itself to both theories. (The first test gave a figure of about two thousand humans; the latest in 2009 of 150 is described in: www.timesonline.co.uk/tol/news/uk/science/article6207399.ece).

If human DNA was totally different from other primates and animals, it would all but prove we were created separate from other life forms, proving our uniqueness. The scenario that best fits the scientific evidence and the Scriptures is that evolution occurred as generally described, but humans were created in the relatively recent past as a distinct new species, not actually descended from other primates, but possessing genes that resemble them. Genetic evidence supporting the common ancestry of all humanity to a tiny group gives compelling support to an important basic premise of the Scriptures.

54:15 We made the flood a sign, but will any take heed?

Genesis 7:19 says Earth was flooded for 150 days and the highest mountains were covered by 7 meters of water. Also every land dwelling creature was killed, except those in the ark. This hardly concurs with evidence. There is nowhere near enough water on Earth for it. Also it is contradicted by genetic evidence.

Of course God could have caused such a flood to occur, covering the top of Mount Everest with water, and the rest of the world with 9000 meters, and then made the excess water and all the evidence disappear, which would explain why evidence for such a flood has not been found, how all the species and their food and water could have fitted in the ark, what the carnivores ate for five months, how the ark kept its structural integrity, (being 135m long, 23m wide and 14 m high) under the weight of hundreds of tons, millions of species, their stores of food and water, how perfectly well they all behaved all that time in the cramped ark, why none of them died in that time, or how they were rounded up from all seven continents.

However, there exists strong physical and archaeological evidence that a massive flood did occur. A subterranean layer of silt three meters thick was discovered in the early decades of the twentieth century in the Middle East. These together with references from various independent historical sources, such as the ancient Babylonian book of Gilgamesh, suggest a major flood in the area did occur. Evidence for it has been found by Columbia University researchers Ryan and Pitman.

In the last minor ice age, glaciers reached down to New York and London. The melting and receding of the vast ice shelf caused a massive rise in sea level. In the Bosphorus Straits, this was held back by a natural dam barrier. At the time, the Black Sea was a freshwater lake. When the sea level reached 170 metres above the lake, the dam broke catastrophically, unleashing a huge flood that devastated everything in the area. This occurred around 5600 BC, surprisingly viable with the time of Noah.

By some estimates the volume of water pouring into the area was equivalent to a thousand Niagara Falls for five months. Further evidence for this was found by the famous underwater explorer Ballard (discoverer of the Titanic) who found a coastline 170m below today's sea level. The topography shows the flood caused 60,000 square kilometres of land to become submerged.

The Koran does not say the flood covered the whole earth, or that all the animals outside the ark were killed. It says Noah was told to take aboard pairs of every species, which could well mean local species, especially domesticated animals. Nor does it say the floodwater covered the highest mountains.

The object of the flood was to destroy Noah's unbelieving compatriots, which would not have required covering all seven continents with water to a height of nine kilometres. If God had wanted, He could have eliminated Noah's people in an instant. He could also have destroyed Pharaoh and his army in their sleep, rather than parting the sea. These dramatic events serve as signs for posterity.

What probably happened was that God forewarned Noah of an impending flood, probably the same caused by the breaking of the Bosphorus dam, behind which a colossal 170m wall of sea water had accumulated. This rise in water level was gradual over many years, but the actual break may well have been precipitated by heavy rains. In the final moments, ground water levels near the natural dam would have risen dramatically, appearing as gushing natural springs, as described in the verse.

Here again the degree of compatibility between the version in the Koran and physical evidence imparts viability and cogency, while the Bible version basically agrees after allowance is made for general exaggeration in all its numerical descriptions. The Dead Sea Scrolls shows deliberate numerical changes compared to the standard version.

As the verse says, there is a remarkable sign in the flood, especially as it is corroborated with physical evidence; but the implications are ignored, as in ...but will any take heed? (A similar catastrophic flood occurred at the natural dam separating the Atlantic and Mediterranean that later became the straits of Gibraltar, but this was at a much earlier date).

11:40 And when Our will was done and water welled out from the Oven, We said to Noah: "Take into the ark a pair from every species..."

The "Oven" is a strange, unknown, unique concept presented as the source and cause of the flood. One shouldn't expect to find perfect explanation for every vague or mystical passage of the Scriptures. Many have become clear only recently. One can speculate the "oven" implied some sort of heating, such as global warming. Evidence shows that around the time of the flood, about 8000 years ago, the world was just coming out of an ice age; an interesting coincidence.

The "oven" could be a figurative reference to some factor causing global warming at the time. The apparently mundane description of the event is simultaneously vague yet agrees with evidence. "Oven" also lends itself to volcanic activity, though evidence connecting it to the flood is lacking.

03:95 The first temple ever to be built for man was that at Becca, a blessed place. (Becca is another name for Mecca).

The Kabah, built by Abraham and Ishmael, is proclaimed to be the first temple. Thus one should not find evidence of any monotheistic temple predating this.

07:80 Remember the words of Lot, who said to his people: "Will you persist in these indecent acts which no other nation has committed before you? You lust after men instead of women. Truly you are a degenerate people."

A clear indication is given that the people of Lot, i.e. Sodom and Gomorrah, were the first homosexual nation, thus we should not find historical evidence for any other nation before them to have been so (even though the claim was made by Lot not by God).

12:42 Now it so chanced that one day the king said: "I saw seven fatted cows which seven lean ones devoured; also seven green ears of corn and seven others dry. Tell me the meaning of this vision, my nobles, if you can interpret visions." They replied: "It is but an idle dream; nor can we interpret dreams."

A curious little considered anomaly is how Joseph attained such high position, as Pharaoh's minister in charge of Egypt's granaries, simply by proposing an interpretation of a dream, which could not have been verified for years later.

Consider the scene: Egypt, a great civilization, sophisticated, industrialized, immensely cultured, rich, and powerful. On the basis of a tentative explanation of a dream, which could easily have been false, the lowest individual from the bottom of the class pyramid, a young foreign immigrant from a starving and insignificant foreign tribe, who also happened to be in prison, within a day becomes one of the most powerful men in the land; the right hand man of Pharaoh.

It's surprising because it wasn't based on something he did, but on an unproven claim that would take years to verify. An explanation for it can be found in the theory of dreams by Sir Francis Crick, (Nobel Laureate for the discovery of the structure of DNA).

Interpretation of Dreams

To explain Pharaoh's dream, a brief account of the mechanism of dreaming is beneficial, especially as so little is generally known about it and is still considered a mystery, even though considerable scientific work has been done on it. Crick says the brain is constantly fed large amounts of information, much of which is extraneous. If this vast influx of data remained uncontrolled, it would lead to data overload in the brain, compromising its efficient operation. Though the analogy is computers, he stresses that the brain mechanism differs fundamentally from them.

Out of necessity, animal and human brains have developed sorting and filtering mechanisms to protect against data overload. Only important information is sent to long-term memory; the thousands of unimportant every day objects, scenes, faces, sounds, conversations, and events are discarded. The filtering is not done

consciously and we're not specifically aware of the process, but if say an unobtrusive item in a familiar environment were changed, we often become aware of it, without any effort or deliberate intention.

Data deemed no longer useful is unconsciously delegated from the main memory to the equivalent of a computer "Recycle Bin." Such information will include those unused or classified as redundant.

The computer is a suitable analogy for explaining the mechanism of the brain even though it has major fundamental differences. Both are highly-developed data processors with two way access to memory. Computers have fixed structure and connections, processing data only in binary code, while neurons work on analogue input and axons change their connections based on the very data input they receive; i.e. input data changes the physical hardware depending on the strength of the signal. The software changes the hardware and wiring. The organic nature of the mechanism is very different to the rigid fixed physical hardware of computers.

It's perfectly reasonable that data relegation should occur at a time when input data is minimal or stopped, i.e. during sleep, when there is virtually no consciousness or data input from the outside world. This facilitates the reverse flow of information, from the memory store back to the processor and through to the visual sensors, (probably why eyes move during dreams in the rapid eye movement phase of sleep or REM). Crick calls this "reverse learning."

Dreams are not supposed to be remembered; it's counterproductive because each time a dream is remembered, the extraneous information expelled from the recycle bin is sent back to the main memory.

Fortunately most do not remember the one and a half hours of nightly dreams. (Humans can survive 50 days without food, but only 7 days without sleep.)

Dreams are processed during REM, which is when the brain comes out of deep sleep and nears consciousness but remains just short of it before submerging back to the deeper troughs of dreamless states. (There is also another form of dreaming that occurs just before REM begins which does not concern us here). This is repeated several times during nightly sleep, with intervals becoming shorter and the troughs shallower as the body prepares for its usual waking up time.

It appears there is a chronological order to dream subjects; in the initial stages of sleep, events of the past are processed, then those of the present, and near morning those concerning the future.

Based on Crick's theory, what appears to have happened is that Pharaoh, naturally solicitous for the welfare of his subjects and sovereignty (as an absolute monarch he considered himself owner of Egypt, all its inhabitants, and the river Nile) may have noticed a pattern or periodicity to the weather affecting crop yield, which after all was the real source of his economic wealth and power. It was in his interest more than anyone else to be mindful of such factors, to recognise such trends and to plan accordingly.

Understandably this would occupy a good deal of his thoughts. Records of harvests and the extents of flooding may have led him to suspect or notice a cyclical trend. The fact that he dreamt about them suggests firstly that he had considered a periodicity or pattern to the harvests, whether real or not, and secondly that he had later dismissed it, reflecting a troubled and unresolved state of mind on the subject. Valid information on this subject would have been valuable for him to alleviate the conflict in his mind.

The fact that he remembered his dream suggests either that the dream was vivid, reflecting that his thoughts on the matter had been intense, or that he was a light sleeper. We can assume the former, because otherwise he would have been constantly asking his ministers about his dreams, and would have heard the same empty reply from them: "It is but an idle dream; nor can we interpret dreams."

Vivid dreams suggest that he may have been woken up by their intensity, which sends the dream subject back to the main memory, leading to repetitive dreams.

His nobles and ministers couldn't enlighten him on the subject, but a cupbearer remembering Joseph's accurate interpretation of dreams asked leave to bring him an answer. The fact that the king gave permission to a vassal to find an explanation by consulting a prisoner reflects the degree of desperation.

The reply brought back was:

12:47 Joseph replied: "You shall sow seven consecutive years. Leave in the car the corn you reap, except a little which you may eat. Then there shall follow seven hungry years, which will consume all but little of that which you have stored for them. Then there shall come a year of abundant rain, in which the people will press the grape."

This may have been a revelation for Pharaoh, expressing succinctly with surprising authority what he may have suspected all along. For him, this wasn't just a chance prediction, but a confirmation of the pattern he had inferred from harvest data that would have been available only to those in authority. He would have been impressed to hear his thoughts expressed with confidence that implied prior knowledge and worded with a clear appreciation of economic realities.

Troubling and confusing information based on restricted data of crop records appeared to have been resolved by someone who had the same thoughts as him, unlike his nobles and ministers. Though a great power, a failed harvest and the ensuing famine was a major threat to Pharaoh and his nation.

A study of climate records for the era could yield interesting results, especially seven-year cycles. These may be found in tree rings in East or Central Africa (from where the tributaries feed the Nile) or from ice layers of Antarctic ice sheets.

Ancient records show famines did occur, which would have been caused by extensive droughts over large areas of East Central Africa.

Hieroglyphs do actually mention famine having occurred around the time of Joseph from an inscription in the tomb of "Ameni", an official of Pharaoh Sesostris 1, written in the 43rd year of his reign: "No child of the poor did I afflict; no widow did I oppress; no landowner did I displace; no herdsmen did I drive away; from no small farmer did I take away his men for my works. No one was unhappy in my days, not even in the years of famine. For I had tilled all the fields of the nome of Mah, up to its southern and northern frontiers. Thus I prolonged the life of its inhabitants and preserved the food which it produced. No hungry man was in it. I distributed equally to the widow as to the married woman. I did not prefer the great to the humble in all that I gave away."

[from Brugsch, `Egypt under the Pharaohs', Vol. I, p. 158] (author's italics).

Based on this article, the California Institute for Ancient Studies says the famine meets the criteria of Joseph's famine in three major aspects:

- 1) The famine lasted several years,
- 2) Preparations for it were made in advance to meet the needs of this disaster by gathering food,
- 3) Food was effectively distributed during the years of famine.

The inscription shows the great famine had been anticipated well in advance. Also Ameni and Joseph have intriguing similarities. Both prepared in advance for the famine, both were in position of power, and both were responsible for food distribution. Also, the name Ameni is close to the word Amin which in Semitic languages means the trusted one, the exact term Pharaoh bestowed on Joseph:

12:55 ...the king said: "You shall henceforth dwell with us, honoured and trusted."

It's quite likely that his adopted name in Egypt would have derived from Pharaoh's epithet rather than an unfamiliar name from an alien language. If he had kept his original name Joseph, his brothers would have recognised him much earlier.

39:42 God takes men's souls upon their death and the soul of the living during their sleep.

A close relation between deep consciousness and the soul is implied here, also that one cannot sin during sleep. Understanding the mechanism will help to illuminate this. (More at Appendix 1)

One can hardly doubt the evolutionary benefits of deep consciousness, yet mysteriously it appears solely in humans. It fits perfectly with the theory that mankind is fundamentally different to animals due to its unique engagement as combatants in the spiritual conflict between good and evil; unknown qualities for all the other life forms.

The instrument used to analyse it is the same that we are studying, the human mind. The qualities that prevent rational evaluation are the same as those

condemned by the Scriptures: pride, vanity, selfishness, and prejudice, while the opposite virtues are encouraged: patience, meditation, self-restraint, and humility.

10:91 "Now you believe!" God replied. "But before this you were a rebel and a wrongdoer. We shall save your body this day, so that you may become a sign to all posterity: for most men give no heed to our signs."

This is addressed to Pharaoh (Ramses II), who about to drown in the Red Sea, finally professes faith and repents. His body has been saved for posterity, exhibited in an Egyptian museum, (recently transferred from another in Atlanta).

Significantly nothing was known about the whereabouts of Ramses for twenty nine centuries. It was not known whether his body had been washed up, destroyed by gravediggers (the usual fate of most Pharaohs) or totally disappeared in the Red Sea, the most likely fate. (By examining the mummy, it would be interesting to determine if death was from drowning).

Exodus 32:21 And Moses said to Aaron, "What did this people do to you that you have brought a great sin upon them?" And Aaron said, "Let not the anger of my lord burn hot; you know the people that they are set on evil. For they said to me, "Make us gods, who shall go before us; as for this Moses, the man who brought us out of the land of Egypt, we do not know what has become of him." And I said to them, "Let any who have gold take it off"; so they gave it to me, and I threw it into the fire, and there came out this calf."

Before assessing the technical aspects of the "golden" calf, let us briefly compare the version in the Koran with that in the Bible in the relatively straightforward story of its worship by the Israelites.

This extraordinary verse in the Old Testament implies that Aaron was the main culprit of the heinous sin of fabricating and worshipping the idol, which is unlikely for several reasons:

- 1) Aaron, as a prophet, knew perfectly well this was a great crime. He is unlikely to have so blatantly violated the Commandments, which had only recently been solemnly given to them by God. The prohibition of idolatry was Commandment Number One.
- 2) He knew perfectly well this would incur the wrath of God and Moses, and would have certainly known that he would be punished for it. Would a prophet fear the punishment of his people more than that of God?
- 3) It would have undermined Moses' authority for Aaron to have acted so blatantly against him.
- 4) The Israelites were either extremely dim-witted, or amazingly ungrateful and rebellious. Only a few months before, they had witnessed the greatest miracles of all time, yet soon after took a crude fabricated calf as their real god. It is unlikely that Aaron, who had also witnessed first hand the great miracles, was also so dim, having been a co-negotiator with the mighty Pharaoh.

- 5) Compared to the severity of the crime, the excuse Aaron gave for his defence was an amazingly weak one; essentially saying: "You know the Israelites are an evil lot. They told me Moses hasn't been around for some time, so make some gods for us. So I did so."
- 6) According to the Bible, when Moses returned, he had 3,000 men executed for participating in this crime. If Aaron had been responsible and the main instigator, his slap on the wrist was incompatible with this slaughter.
- 7) When Joseph immigrated with his clan to Egypt, his tribe numbered about 80. This can be estimated from the number of offspring of Abraham and his descendents. Also an independent estimate can be made from the role an additional camel load of corn had made, mentioned in the Koran. It is unlikely that in the two centuries from Joseph to Moses, the segregated Jewish tribe had grown so great that after the execution of 3000 men it could still go on to defeat the Hittites and other tribes mentioned in the Bible. Up till recent centuries, general population growth rate was very low, hardly changing over centuries. In addition to this, various massacres were inflicted on the Jews by Pharaoh, such as killing of all male babies at the time of Moses' birth. This detracts from the accuracy of the numbers quoted in the Bible, as usual.
- 8) It is implied that after the gold was thrown into the fire, almost miraculously a gold object with the shape of a calf came out. Who did the miracle? The people demanded a god be formed, but they hadn't specified the shape. It so happened that the shape turned out to resemble a calf; (it must have been a very crude affair, requiring a fair stretch of imagination to resemble a calf).

The Koran version says:

20:84 Angry and sorrowful, Moses went back to them. "My people," he said, "did your Lord not make you a gracious promise? Did my absence seem too long for you, or was it to incur your Lord's anger that you failed me?"

They replied: "We failed you through no fault of ours. We were made to carry the people's trinkets and throw them into the fire. The Samiri did the same and forged a calf for them, an image with a hollow sound. "This," they said, "is your god and the god of Moses whom he has forgotten.""

Did they not see that it returned them no answer, and that it could neither help nor harm them?

Aaron had said to them: "My people, this is but a test for you. Your Lord is the Merciful. Follow me and do as I bid you." But they had replied: "We will worship it until Moses returns."

Moses said to Aaron: "Why did you not seek me out when you saw them doing evil? Why did you disobey me?"

"Son of my mother," he replied, "let go, I pray you, of my head and beard. I was afraid you might say: "You have sown discord among the Israelites and did not wait for my orders."

Then having interrogated the Samiri, who in response gave a mysteriously worded defence, Moses gave his verdict:

"Be gone! You are an outcast in this life, nor shall you escape in the life to come, your appointed doom."

Unlike in Genesis, here everyone acts in character. Addressing the Israelites, Moses calls to their attention the Promised Land to induce shame and regret before he passes sentence on them. The people put up a spirited and viable defence, saying they were forced into it, portraying themselves as reluctant participators, heaping blame onto the Samiri group.

It was *not* claimed that a calf came out of the fire miraculously; an obvious lie that would have infuriated Moses, implying God was responsible for the miracle.

The Samiri cunningly introduced the calf as the real god that Moses had forgotten; otherwise they might have asked why this new god had never been mentioned before.

The passage implies Aaron was not the instigator and was fully aware of the crime. Not only had he not helped them, but lacking the authority, was disobeyed and ignored.

Also the defence he offered was realistic and viable: he was afraid that had he persisted and been more forceful, a civil conflict between the groups would have ensued and created havoc and strife, then Moses would have reprimanded him for having acted alone and hastily, before waiting for his orders.

The Koran version appears more plausible and realistic, while the Genesis account shows faults and contradictions in just one paragraph. The adjoining verse says:

Exodus 32:20 And Moses took the calf which they had made, and burnt it with fire, and ground it to a powder, and scattered it upon the water, and made the people drink it.

This isn't possible. Gold has the eminent property of not oxidizing or changing into anything else except with great difficulty. It is attacked only by aqua regia. In whatever state it enters fire, it reverts back to its shiny metallic state. If a gold salt, i.e. gold oxide, is heated, it changes spontaneously from the salt back to the shiny metal. It is one of the few metals to do so, (thus called "noble" since it resists "corruption" with other elements).

Even if it did not become oxidized and had remained in the metallic state, it would have been difficult to grind it into a powder, because gold is soft and malleable. When hammered, it doesn't break but flattens.

If it does not change from its metallic state when heated, why would they have put it in the fire? They could have crushed the calf as it was and got the same results.

Furthermore, it would have been strange for the Israelites, on a whim, to relinquish their most expensive possessions merely to make an idol, especially since they knew that this was a great sin and had been explicitly forbidden them. In their sudden rush out of Egypt, they hadn't time even to leaven bread, which takes a few hours. They must have left behind most of their worldly goods, except domestic animals, bare essentials and the clothes and body ornaments they had on. The gold would have comprised a considerable amount of their assets. It's fair to assume the Israelites, as a class of wretched slaves, would not have had much gold in the first place.

Nowhere in the Koran does it say the calf was made of gold, only that the people were asked to throw their trinkets into the fire. It is more likely that these trinkets were made from bronze or copper, which would fully explain how it reacted in the fire.

Copper melts at 1083 C and gold 1064 C. It could *not* have been easy for the Israelites to attain such temperatures without a kiln and bellows, melt the metal in a crucible, and pour it into a mould. The Koran says the trinkets were heated in the fire and then *forged* into a hollow shape resembling a calf, not melted and poured into a mould. This would have required less skill, lower temperature, no crucible, no mould, but merely a hammer; (the result would still have been crude).

The Samiri culprits who did the forging, probably had experience of this from Egypt, where they may have been metal smiths.

The Koran says when Moses returned:

20:98 "Behold this idol which you have served with such devotion: we will burn it to cinders and scatter its ashes over the sea."

This is possible with copper but not gold. Heating copper in air causes oxidation, forming dark solid copper oxides, which are brittle and can be readily crushed into a powder. If stoked enough in the fire, it turns into a powdery ash by itself without grinding.

Many potential believers become exasperated, discouraged, and disillusioned by numerous faults in the Bible, which are inconsistent with divine authorship. Christian believers ignore these details and observe the general message instead, discerning cogent viability.

A rough personal estimate is that twenty percent of the Old Testament is fabricated; including the genealogies and most of the numerical figures, while fifty percent has had some alterations (like the above verses).

Genesis 33:03 Go up to a land flowing with milk and honey; but I will not go up among you, lest I consume you on the way, for you are a stiff necked people."

Barely escaping destruction for committing the greatest crime of all, they are told to proceed immediately to the land flowing with milk and honey. The inconsistency is unsettling.

The passage also presents another example of the timeless habit of humanising God. In this case, He is essentially a person barely able to control His temper, but invisible and more powerful. Also He is not omnipresent, but present at one place at a time.

Remarkably, most of His time is spent wandering about with the Israelites, who despite their amazing ignorance, idolatry, and stiff necked nature, were given more attention than the rest of the universe.

Worse humanization appears in the next few verses; Moses asks to see God in person and is told that he can't see His face, but can catch a glimpse of His back as He passes him by.

Despite the discrepancies, it still cannot be dismissed out of hand, unlike scriptures of other religions, because one can still discern a convincing framework of truth. There can't be much doubt that the Bible is based on real events, though much of its details have been altered, especially on political, tribal, and numerical issues.

Few can take the assertion seriously that only Jews can go to Heaven, that there are only 124,000 places there, and all have been accounted for. Hundreds of such assertions exist.

As demonstrated in this chapter, if a little allowance is made that the Bible has been tampered with, an undeniably significant degree of correlation with scientific evidence is readily obtained, but complete separation of wheat from chaff is difficult.

Refusing to accept that the Bible has been corrupted, or insistence of its infallibility as the Word of God (which isn't even claimed in the Bible) is self defeating. It alienates hundreds of millions of rational nominal Christians; in the Age of Reason they cannot corroborate the contradictions and inconsistencies with its infallibility.

Another fatally flawed approach is the futile attempt to *prove* the existence of God from the Bible, which many pastors and priests persist in trying. Their failure at the attempt weakens them and strengthens the case for atheists.

The Propensity for Deification

Throughout history, humans have shown a considerable tendency to humanize gods and deify humans.

The oldest idols excavated are figures of morbidly obese women, probably gods of fertility or abundance. Women at the time were probably very thin from sparse diets and hard work. (Studies show that parameters of beauty in all cultures are similar, but in nations that have experienced famine, fat women are more attractive, while in those that haven't, thin women are.)

The trend of humanizing gods continued with Babylonians, Egyptians and Hindus who gave animal appendages, heads of jackals, elephants, falcons, and crocodiles. Greeks and Romans disposed of animal appendages, progressing to gods that resembled themselves, including attire, hairstyles, culture, and lifestyle.

Even strictly monotheistic Jews succumbed, influenced by the splendid gods of Egypt with their dazzling temples and ceremonies. For many years they stubbornly tried to reintroduce idolatry, thwarted with difficulty by prophets and a hard-core minority.

They eventually did the next worst thing: humanized God. In Genesis the same God, who created the universe in all its stupefying power, is portrayed physically walking about in the Garden of Eden, shouting: "Adam, where are you?" wondering where he might have gone to.

Christians outdid even that; their God became visible, slept, ate, played as a child, worked as a carpenter for twenty years or so, and eventually was tortured and killed.

Emperors of Japan were literally regarded as gods, but today in the rational age Japanese ultra-nationalists regard them as descendent of gods; similarly for Jade Emperors of China, and the Dalai Lama, who is regarded as the reincarnation of Buddha. Previously revered as semi-god in the closed court, the Dalai Lama is now gregarious and democratic, associating with celebrities in the best circles.

Abraham told a king afflicted with delusions of deity: "God has the power to give life and to cause death." The king replied: "I too have the power to give life and to cause death." Abraham said: "God brings up the sun from the East. Bring it up yourself from the West."

28:75 Korah was one of Moses' people. But he treated them with insolence, for We had given him such treasures that their very keys would have weighed down a band of sturdy men. His people said to him: "Do not exult in your riches; Allah does not love the exultant. But seek, by means by means of that which Allah has given you, to attain the Paradise to come. Do not forget your share in this world. Be good to others as Allah has been good to you, and do not strive for evil in the land, for Allah does not love the evildoers." But he replied: "These riches were given to me on account of the knowledge I possess."

As slaves in Egypt, the Israelites didn't possess much material wealth. Considering the short notice of their flight, they must have been forced to leave behind much of what little they owned. Thus at the beginning of their flight they must have been pretty poor.

Several times they were close to revolt against Moses due to their starvation and deprivation, which they said was worse than their life of slavery. How was it then, that among such poor wretches, Korah was able to amass such a vast fortune?

They didn't have agricultural products as wanderers in the desert. They appear to have been hostile to most tribes they met up with, fighting with the Canaanites, Amorites, and Hittites; so presumably not much trading was involved. But even if they traded or succeeded in obtaining booty, it would have been evenly distributed.

If Korah was a usurer, what use would the loans have been to the Israelites, and how could they have repaid the interest? His wealth exceeded the rest of the Israelites put together. No mention on the source of his wealth is given, but an original postulate is proposed that the source of wealth was copper ore.

Recent archaeological excavation shows evidence of copper mining in the Sinai desert in antiquity. The period should correlate with the forty-year wandering.¹

As a slave race, some of them might have worked in copper mines for their Egyptian masters, where they learnt about excavation, benefication, and reduction. During their years of wandering in the Sinai, Korah might have recognized copper ore deposits. Using his experience he might have organized its excavation, concentration, and even conversion to metal.

Great copper deposits in Sarcheshmeh near Kerman (Iran) were discovered on a desolate isolated mountain by a shepherd, who had noticed bright turquoise salt crusts next to a stream (Sarcheshmeh means spring head). On either side of the stream iridescent turquoise deposits can still be seen standing out from the surrounding dull ochre earth.

Korah might even have produced the metal; not difficult involving blowing air through molten copper mineral. Copper was so valuable that it was readily tradable as metal or ore, even with hostile tribes.

The keys obviously don't resemble modern small steel keys, but were large and heavy. In some villages today, notably Abianeh near Kashan (Iran), house keys are still used 25cm long weighing half a kilogram. Korah's keys were unlikely to be smaller.

His treasure wasn't jewels or gold, but rather copper products. The chests could not have weighed more than the load of a pack animal, as they didn't have wagons or chariots. Each of these would have had at least one of these giant keys. Physical evidence for these may appear from searching for evidence of copper mining in the Sinai, the dates, and comparing the methods used with those of the Egyptians. Also, since an earthquake buried Korah and all his treasure, seismic fault lines in the Sinai may help locate the treasure itself.

84:18 I swear by the glow of sunset; by the night and all that it brings together; by the Moon in her full perfection; that you shall march onwards from state to state.

see: http://www.jstor.org/pss/3853955,

http://www.ucl.ac.uk/iams/projects.htm,

http://www.reshafim.org.il/ad/egypt/timelines/topics/mining.htm.

Written before even the Arabian Peninsula had been conquered, this was very prescient. After Mecca capitulated without a fight, most of the Peninsula converted to Islam also without fighting. After the death of the Prophet, his followers indeed marched from state to state, conquering in a remarkably short time every nation in North Africa, the Persian Empire and much of the Roman Empire, from Morocco and Spain to the borders of China, from the Caucuses to Sudan.

This was one of the greatest conquests in human history and would have been greater but for the civil wars over succession of Caliphs, culminating in the Shiite schism. Momentously, the civil war isolated Fatemid Spain from the monolithic Islamic Empire, thus weakening the drive into France and Europe. (This happened again in the 16th and 17th Centuries, when the Sunni Ottoman armies were prevented from advancing further into Europe by wars on its Eastern borders with Shiite Iran.)

There was no reason why these vast conquests could have been anticipated. There were no secret weapons such as elephants, Greek fire, artillery, etc.; no vast numbers of soldiers as Tamerlane and the Genghis Khan had, no regimented professional armies like the Romans or Persians. They didn't even have any experience of fighting on a large scale, but only tribal skirmishes.

There had been only two battles in win Mecca, Medina, and the rest of the Arabian Peninsula. In the first of these, the battle of Badr, the Muslims numbered 310 men. In the second, at Ohod, where the Muslims were defeated, there were only two thousand. This was the sum of their war experience.

There were no great generals like Hannibal or Alexander, no great innovation in the art of war such as the Macedonian Phalanx; nor did they have much discipline (archers breaking rank turned a victory into a defeat at Ohod) unlike the professional, regimented, well-equipped, and uniformed armies of the Roman legions and the Persian Army, drawn from a hereditary military caste with centuries of tradition and experience. Also the Persians did have a secret weapon, which was an effective and successful form of proto land mines. The first recorded instance of their use in warfare was against the Arabians (see Glubb).

There was nothing exceptional to suggest that their great conquests could have been possible, let alone likely. If the probability of such a prediction had been evaluated at the time, the chances would have seemed remote. The armies of the two great world superpowers were soon repeatedly defeated.

An idea of the degree of improbability involved can be estimated from the rarity of similar instances in world history.

If numerous victories had *not* occurred, the verse would have been contradicted, but significantly the conquests were even greater than the implication in the verse, conforming to the general tone of understatement in the Koran; "state to state" meant half the world

On the death of the Prophet, there was general apostasy and revolt in the Arabian Peninsula. The Muslim forces of Mecca and Medina managed only with great difficulty to subdue the Peninsula in a bitter civil war. There should not have been any great victories after that, considering the ferocity and cost of the civil war, which would have exhausted any other nation. An intense and bitter civil war is rarely followed by huge international success. Where else was an intense civil war followed by numerous international conquests in so little time? As the verse implies, the conquests were pre-ordained.

Only immediately after the death of the Prophet had there been any faltering. In the commotion, Omar said he would cut off the legs of anyone who said the Prophet is dead. Abu Bakr, the first Caliph, after calming the crowds with difficulty said: "Those who worship the Prophet should know that he is dead. Those who worship God should know that he is alive and everlasting." He shamed the crowd for over-zealously basing their faith on the Prophet rather than God.

Secular Western historians in a snide attempt to disparage the great conquests, revealing latent prejudice and general ignorance, attribute these amazing conquests to the exhaustion of the Roman and Persian armies from years of war with each other. They conveniently ignore a blatant contradiction that the Roman and Persian Wars exhausted them but the intense civil war among the Arabian tribes strengthened them.

The assertion is analogous to Turkey, say, having gone through a bitter civil war during the WWII, suddenly were to smash both the Allied and Nazi armies, conquering Europe and Russia. Could such astonishing success be attributed to the exhaustion of the Nazi and Allied armies who were in a protracted state of war with each other? The assertion is petty and baseless.

Muslim nations, far from feeling humiliated by these conquests, regard them as their Renaissance; deliverance of their ancestors from an age of ignorance; (a notable exception is secular Iranian nationalism, which after fourteen centuries is still resentful of the Arab conquest yet worships Western culture, warts and all.)

On the contrary, the wars between the Romans and Persians meant that their professional armies were in a constant state of readiness and at the peak of their strength. Both troops and generals would have possessed abundant, fresh valuable military experience, unlike the Arabians; little experience led to amateurish blunders.

For example, soon after the death of the Prophet, Omar the second Caliph ordered a jihad against the great Persian Empire; comparable to modern Turkey attacking the Soviet Union. Jihad was voluntary of course and the prospects of fighting the Persians were so daunting that few volunteered, unlike the campaigns against the Romans in Syria, for which many enlisted and resulted in great successes.

The low number of volunteers infuriated Omar, who had little patience for minor technicalities such as being vastly outnumbered. On one occasion, he is said to have sent a force of 10,000 to attack a Roman army of 200,000 (Glubb). He also had a bad temper, which often got the better of him. Following a lack of enthusiasm for jihad against the Persians, in a fit of rage he decreed that the first person to enter the city gate the following morning would become the commander of the expedition. The intention was to humiliate his army, a fine way to raise morale and prepare a great campaign against a great foe.

The first man to enter the gate, who probably came for groceries, was proclaimed commander no doubt to his astonishment. None of these years of military academy training nonsense for Omar, whose conquests exceeded Alexander's. He had little regard for the military abilities of his generals or the finer points of military strategy and tactics. All that was required was faith.

An army was eventually put together and sent off under the new commander. Half way through the battle, seeing a half hearted effort from his army, he ordered his own fleet to be burnt in sight of his troops to discourage them from thinking of turning back. This had the opposite effect; the outcome was that they were roundly defeated by the Persians.

Previously, Omar was asked by his generals for permission to form a navy. He asked them what it was like to put soldiers on ships, as he had never seen the sea or a ship. They replied it resembled insects on a branch swaying in the wind. Appalled by such a prospect for his Mujahedin he refused, thus considerably setting back the impetus of Muslim conquests in Europe.

Although among the greatest conquerors in history, Muslim armies achieved their great success *despite* Omar, not because of him.

Alexander, Genghis Khan, and Tamerlane were great conquerors. Tamerlane conquered Russia and sacked Moscow on one of his minor expeditions, what Napoleon and Hitler failed despite enormous effort. But what legacies did they leave? Culturally nothing. Alexander's empire crumbled with his death; the Greeks soon adopted the local culture and fully integrated into them. Persians considered themselves more sophisticated than their former Greek colonies. No Greek culture remains in Persia while the Greeks who remained adopted Persian culture.

Genghis Khan and his hordes were primitive, uncivilised, and savage; the embodiment of barbarism. They never washed from birth to death; neither their bodies, nor clothes nor utensils. Washing was considered polluting natural waters. The first and foremost law they introduced in conquered lands was the complete forbidding of any form of washing. Their only attempt at hygiene was the use of animal lard, which they rubbed on their bodies. (Their armies were probably smelt before they were seen.)

The conquests of Genghis Khan and Tamerlane were characterized by great massacres and genocide, but no cultural or philosophical legacy. Soon after their conquests, the Mongols too adopted the local culture; Islam in the West, and Chinese in the East, totally dissolving into them. All vestiges of their own culture disappeared within a couple of generations. In the West they became converts of Islam and its zealous champions, culminating in the Ottoman Empire.

Compare these with the conquests of Omar. Civilians were not targeted or slaughtered. Conversion was voluntarily, resulting in a complete social revolution in beliefs and customs, the formation of a monolithic Islamic state transcending borders and race, a universal sense of brotherhood including former adversaries, the elimination of racial and national divisions, the universal adoption of a common language, elimination of hereditary castes, (Persian society was divided in an Apartheid of four main castes, the court, military, clergy, and peasants, between which no intermarriage or mobility was allowed), revival of literacy and meritocracy, the blossoming of art and literature, and the overwhelming domination of Islamic philosophy and culture replacing whatever had been before, defining and affecting every aspect of daily life for all members of society thereafter.

Incidentally Omar, the ruler of an immense empire covering half the world, never had a bodyguard and was assassinated in the streets by a disgruntled Persian, because Omar had humiliated his great nation.

Considerable prejudice and resentment remains from the myth that Persians were converted to Islam at the point of the sword. Nothing could be farther than the truth. In fact the exact opposite happened. Arab governors refused to acknowledge the conversion of Persians because it reduced their income from tax of non-Muslims. They practically forced the Persians by the sword not to convert, much to their outrage; a fact secular Iranians are shamefully and inexcusably ignorant of.

03:55 He said: "Jesus, I am about to cause you to die and lift you up to Me. I shall take you away from the unbelievers and exalt your followers above them till the Day of Resurrection."

The extraordinary claim is made that as long as the world exists, followers of Jesus will be more exalted than pagans. Such claims from a new religion are counterproductive and inexplicable. The Prophet Mohammad was inexplicably exalting the status of Christians, even though they weren't his allies; another example of a political stance that could only weaken his cause if he had been a false opportunistic prophet, but fits with the precept that Islam is not a competing exclusive religion, but a confirmation of monotheism, that had become corrupted in other religions by the humanisation of God.

There was no reason at the time why Christians would be exalted above pagans. At the height of its glory, before the Koran was written, the Roman Empire had

been breached and Rome itself had been sacked by pagan Germanic Goths and defeated often by Persians (Emperor Valerian was taken captive).

No one could have predicted the outcome of the wars between the Christian Roman and Zoroastrian Persian Empires. The claim must have seemed dubious during the Golden Age of Islamic civilization, which coincided with the Dark Ages of the West, when the Goths were sacking Rome and Haroun Al-Rashid was thrashing Byzantium.

Interestingly, it implies this status will not change and if it does, the world may not outlast it.

54:15 We have made the Koran casy to remember, but will any take heed?

It is extremely difficult to write a book of 150,000 words that is easily memorisable. Many memorise it by heart. Numerous instances exist of children memorising the Koran by heart, some as young as eight. Has anyone memorised the Bible? Can the same be said for the Old Testament, or the New Testament, or any other scripture? To compose 400 pages of verse that is easy to memorise is difficult enough; for prose it is much more difficult. This aspect of the relative ease of memorising the Koran is little considered, as inferred in "...but will any take heed?"

29:48 Never have you read a book before this, nor have you ever transcribed one with your right hand. Had you done either of these, the unbelievers might have justly doubted. But to those who are endowed with knowledge it is an undoubted sign. Only the wrongdoers deny our signs.

Despite Jesus' many miracles, his philosophy nearly died with him, reflecting a generally shallow level of belief. The Apostles all went into hiding and disowned him. Were it not for Paul, Christianity probably might not have survived.

A question arises: what good did all the miracles do for the cause? The conversion of Paul and Constantine were more beneficial for Christianity than all the miracles performed by Jesus. (A distinction must be made between, on the one hand, the actual effect of miracles at the time, and on the other hand, the effect of referring to them).

Ironically, Paul's conversion had nothing to do with Jesus' miracles. *Despite knowing about them*, he had been Christianity's most fanatical enemy and prosecutor until the vision on the road to Damascus: where the clouds part and Jesus says: "Why persecuteth thou me?"

There is a less miraculous and more likely explanation for this. On the road to Damascus, where he wasn't actually engaged in his main occupation of interrogating and prosecuting Christians, he had plenty of time to reflect, especially on the strange serenity with which Christians faced execution. The peace with which Christians accepted death and, even more strangely, forgave their prosecutors must have been in great contrast to anything he had seen before.

Perhaps this extraordinary fearlessness of death had also attracted Constantine's attention. Was he influenced by their piety, or did he see in Christians a potential power base? He converted to Christianity while he was Emperor of the western half of the Roman Empire. Despite a peace treaty with the eastern half, he was planning to attack and conquer it.

Was he influenced by the considerable Christian population in the Eastern part? Did he convert to get their allegiance? Was his conversion political? He certainly benefited politically from it and his actions showed he was as ruthless and shrewd political player as the most ruthless politicians today.

He demonstrated an intense determination to become sole Emperor. Though he had a peace treaty with the Emperor of the eastern part to rule jointly, he treacherously broke the pact and killed him. Soon after that he killed his own wife and only son (for unknown reasons).

Paul too must have been affected by the Christian martyrs he had put to death. They had only to recant to live yet refused to do so. Their surprisingly noble piety and courage must have affected him and provoked troubling questions.

"Why persecuteth thou me?" may have been the last words of some martyrs. The answer to this question required deep reflection. (If true, the martyrs didn't die in vain. Their dignity and compassion before death and their entreaty to Paul "Why persecuteth thou me?"

laid the foundation of Christianity and changed the course of history.)

We know from his epistles that Paul had a pious, reasonable, just character, which he is unlikely to have acquired in a flash. His fanatical persecution of Christians was based on a sincere belief that they were heretics, based on indoctrination as a Pharisee, thus he believed his actions were justified.

Reflecting on all this on the long road to Damascus, it may have occurred to him that these martyrs were showing greater spiritual piety than Pharisees themselves, whose basis of faith was based on fanatical adherence to the letter of the law. The realisation that maybe he had been wrong about them came to him perhaps like a revelation.

One man's piety may be another's heresy. Shiites view themselves as pious Muslims; Wahabi Sunnis see them as heretics and consider themselves pious Muslims. If absolute values are not involved, idolatry or devil worship is just as valid as any other religion.

Paul knew that on becoming a Christian, he would invoke the double fury of Pharisees and certain death for his treachery, but like Christians he had become fearless of death; he too had seen the light. The spirit is more important than the body. The spirit of the law is more important than the letter. He became like the victims he had persecuted, suggesting he had been strongly influenced by them.

(Paul was basically the founder of the Christian religion. At this stage there were

just followers of Jesus and the religion itself was not as specific and delineated as it was after Paul. Jesus himself did not advocate a new religion specifically.)

Unfortunately the account of the miracle and conversion on the road to Damascus has set a fatal and dangerous precedence for Christians. It has induced a subconscious inference that they are free to go about their lives doing whatever they want until a religious experience occurs to initiate their induction to piety.

Miracles had little effect on Pharaoh and his people (except to drown them). They also had little effect on the Israelites, who worshipped idols soon after seeing the most spectacular miracles ever. They had little effect on Jews after Jesus. They also had little effect on the conversion of the Roman Empire to Christianity. It was not the miracles that laid the foundation of Christianity, but the message.

Paul's Epistles were based exclusively on the merits of the new philosophy and the virtues of love and compassion, not on Jesus' miracles, which he barely mentions.

Indeterminacy prohibits verifiable miracles in today's rational age. Faith based solely on miracles is flawed. In contrast to past miracles, for which no evidence remains, the Koran itself is miraculous; its human authorship strains credibility, but just short of the limit.

Though the nature of its authorship is miraculous, the message itself sustains it, not the miraculous manner it was written.

Its uniform tone and divine perspective is unlike other scriptures that have a pronounced human/tribal/racial perspective, replete with heroes and national saviours who conquer neighbours and save the tribe.

CHAPTER 7 COSMIC FINE-TUNING

Science versus Religion

Pascal's Wager, written early in the 17th Century in the infancy of the modern scientific age, has caused only an occasional ripple, but cosmic fine-tuning, discovered mid 20th Century, has produced a commotion in philosophy and put the scientific community in a flurry, causing scientists to lapse from their usual unwavering irrationality.

Van Inwagen, a prominent professor of philosophy, said that deductions from it "must be the most annoyingly obtuse arguments in the history of philosophy." Note the intensely emotional component in a scientific analysis.

What is the source of irritation? Is it the exasperating inference from circumstantial evidence that God exists? Would this kind of emotional outburst be generated if the subject was a galaxy?

The issue has produced yet another confrontation in the ongoing historical struggle between dogmatic religion and rational science. Some historical background is helpful.

Round 1: the Pope loses to Galileo in a scene embedded in the Western psyche. Assuming the spat was ideological and not personal, the claim that Earth is at the centre of the Universe was merely a personal belief of the Pope, who perhaps also believed that Rome was the centre of the world, and he at the centre of that.

Though often used to discredit the Church, nowhere does the Bible say the sun revolves around the Earth or that it is at the centre of the Universe or that it is flat.

Galileo, a lifelong friend of the Pope, got into trouble because in his book he inferred that the Pope was a simpleton.

Heliocentric evidence used by Galileo was supplied by Copernicus. Secular triumphalists should note that Copernicus' upbringing as a poor orphan and his education and lifelong study of astronomy was financed by the Church, which didn't even burden him with religious chores. It allowed him to pursue his astronomy at leisure, even though he was a priest.

If the Church hadn't been so generous, Western science would have been set back by many decades. (Anyway, he too was wrong in believing in a heliocentric universe).

Ironically, the Anthropic Principle was first proposed by Brandon Carter in 1973 at a special symposium celebrating Copernicus' 500th birthday.

Round 2: Wilberforce, Bishop of Oxford, loses to Huxley (Darwin by proxy). The account of this dramatic confrontation together with the monkey diatribe is retold relentlessly in every book about Darwin. It now appears the story is distorted and perhaps false.

Darwin said the review of his "Origins of Species" written by the Bishop of Oxford "is uncommonly clever; it picks out with skill all the most conjectural parts and brings forward well all the difficulties. It quizzes me quite splendidly." Then in a letter to geologist Charles Lyell, Darwin wrote "the bishop makes a very telling case against me." Wilberforce's comments caused Darwin to make modifications in a later edition of the book.

Ironically opponents of religion seized the theory of evolution to justify their predetermined atheism, while the bishop was scientifically helping Darwin to improve his theory.

The alleged diatribe, first recorded 38 years after the event, regrettably has found priority over Darwin's own words; an example of spin defeating facts in modern science history books and the latent antipathy of science towards religion.¹

Another fact inexcusably overlooked is that the co-discoverer of evolution was the brilliant naturalist Alfred Russel Wallace, a very pious theist. His letter to Darwin in 1858, in which he says his findings suggest the evolution of species, precipitated the publication of the "Origin of Species."

If Wallace had sent his findings to a science journal instead of Darwin, he would have become the officially recognised author of evolution. Fearing he was about to be scooped, Darwin rushed his own version to publication within a month of receiving the letter. Fortunately for Darwin, Wallace was at the time immersed in the jungles of Malaya collecting evidence for his theory.

In his eight-year expedition to the tropics, he collected 125,000 animal specimens, on which he based his theory of evolution. One wonders what atheists would have made of the theory of evolution if the pious Wallace had nipped Darwin in publication.

Amazingly Wallace was also first to propose the Anthropic Principle. He said the universe may have the properties it does "in order to produce a world that should be precisely adapted in every detail for the orderly development of life, culminating in Man."

¹ More at: http://www.ldsmag.com/ideas/050211darwin2.html

He must have been a brave scientist, knowing his radical theory would draw ridicule from his contemporaries, though it now looks surprisingly prescient. He also made a prodigious number of seminal contributions in natural history, geology, archaeology, primatology, linguistics and biogeography, as well as evolution.

Round 3 is now in progress. Cosmic fine-tuning presents abundant circumstantial scientific evidence suggesting a designed universe, which implies a Designer. Science is on the defence and up in arms. In the ongoing confrontation between science and religion, is today's generation of scientists going to let the side down? No way. A strong emotional component has taken hold.

Multiverse Scenario

In the 1970s, the realisation developed that the probability of life forming spontaneously is staggeringly low. The effect is called "cosmic fine-tuning." In reaction to this, the Anthropic Principle was developed to take into account the effect of the observer on the data, the "observation selection effect."

There are a hundred or so fundamental physical constants which determine the nature and properties of the universe. If the value of just twenty of these had differed by a tiny amount, the universe could not have allowed life to develop. The probability of these values being exactly right is a tiny percent to the power of at least twenty, which gives a minimal probability of about 10exp-30, one in a thousand billion billion, which is a hundred million times greater than the number of stars in the Universe. Even if the permitted variation for the physical constants were ten percent, the probability becomes a hundred billion billion.

If for every star there were one hundred million universes, only then could one expect a universe to form spontaneously with just the right properties to support life. Luck just doesn't apply. The probability is so low that it threatens the inviolable principle of Indeterminacy.

The prevailing counter argument is that had it been any other way, we wouldn't be here pondering on it, but this does not decrease the significance of the amazingly low probabilities.

Scientists have rushed to the rescue with more haste than prudence. They have found a solution that does not require a Designer. Their solution is that there are infinite universes, a multiverse. Though there isn't evidence for this, one could be forgiven for thinking otherwise. The unpalatable alternative is a Designer, which for many is unacceptable even though the attitude is irrational and unscientific.

Circumstantial evidence presented here suggests the existence of God is a real distinct possibility. No evidence has ever been found, or ever will be found, that can prove otherwise, yet many scientists refuse to consider the possibility, demonstrating prejudice.

It's better to reflect on circumstantial evidence than be gripped by emotions, especially as the multiverse conjecture has flaws. For example, the accelerating rate of expansion means it will grow to infinite dimension. How can there be an infinite number of infinite sized universes, or even numerous infinite universes?

Remember we are considering an *infinite* time scale. In a multiverse there will inevitably be infinite universes expanding from the infinite past. If other universes have developed infinite size, presumably our universe would be engulfed in them. Can infinite universes with different physical constants overlap?

The alternatives are:

- There is one universe, infinite or verging on the infinite.
- There are infinite universes.
- There are a finite number of finite universes.

A single infinite or very large universe is viable. Infinite universes are less feasible, especially if each is infinite. A finite number requires a restraining factor that limits the formation of universes. This super-factor has to have greater power than numerous universes to be able to restrain limitless formation. It would have to be greater than universes and above the laws of physics. It would have to exist outside universes, yet still govern their properties.

It is difficult to imagine any entity that governs the property of a universe from outside it. If we were to define such a super-factor, we might find it similar to our definition of God.

Time, spatial dimensions, energy, entropy, and the laws of physics are all created entities specific for each universe. We cannot even be sure if laws of mathematics valid in this universe apply in another. Perhaps the four main dimensions of space-time of our universe cannot coexist with those of others. Can a location of space have more than three main spatial dimensions or more than one time dimension?

Some universes may have a full quota of eleven or twenty two macrodimensions. How could these coexist with alien dimensions? Can a single point have multi-time or overlapping space dimensions? (Some have suggested that two time dimensions exist simultaneously, but this is still conjecture.)

It's also unlikely that any point can have more than one value for each of the universal physical constants. It appears unlikely that universes can overlap or merge without restriction on dimensions. An infinite number of infinite sized universes sounds contrived.

The probability for numerous universes is less than for a single universe. The single universe, either finite or verging to infinite, appears the most likely alternative of the three.

Another hypothetical scenario is the Wheeler cosmology which does away with the crowded infinite dimension problem. It has only one universe, which eventually stops expanding, deflates, implodes, re-explodes, each time with different physical properties. This too is speculative as there is no evidence for it.

If the oscillating cycles of such big bangs and big crunches were repeated about a thousand billion billion times, only then a universe with life-supporting properties such as ours could reasonably form by chance. But in many of these cases, the universe will expand for ever, as ours is doing, which doesn't fit with Wheeler's hypothesis.

The one universe we do know of contradicts it, let alone zillions of hypothetical ones.

Proposed Alternatives

The multiverse has only a tentative hold; a possible solution in one of the equations of string theory, which some scientists do not accept. It is all in the early stages. Even more fantastic notions without the slightest shred of evidence are presented to counter cosmic fine-tuning. Some of these are compiled in "Anthropic Bias: Observation Selection Effects in Science and Philosophy" by Nick Bostrom (New York: Routledge, 2002). Since the Anthropic Principle, like Pascal's Wager, is one of the few areas where scientific evidence supporting this theory exists, these are considered in greater detail. The above book is representative of current knowledge on the Anthropic Principle. (Extracts from it are presented here in quotation marks):

"And there are live speculations that it might be possible for advanced civilizations to spawn new universes and transfer some information into them by determining the values of some of their constants (as suggested by Andrei Linde, of inflation theory fame), by tunnelling into them through a wormhole (Morris, Thorne et al. 1988), or otherwise (Cirkovic and Bostrom 2000; Garriga, Mukhanov et al.2000)."

An advanced civilization creates a new universe (ours) by powering an almighty big bang, then travelling into it through a wormhole determines the values of the universal constants in that universe, then from their home universe makes adjustments to the physical constants of the newly created universe to allow life to develop.

Despite a one in gazillion probability, such far-fetched scenarios are proposed as viable explanations for the hundred orders of magnitude probability for intelligent design in cosmic and terrestrial fine tuning.

Consider the anomalies: how did the universe of the advanced civilization become so hospitable to life in the first place? That too requires cosmic fine-tuning, an improbability of around negative thirty orders of magnitude, (10exp-30), multiplied by the probability of the development of an extremely advanced

civilization, ditto ability to travel through wormholes safely back and forth, ditto the ability to harness the energy for a big bang, ditto the ability to travel through wormholes, ditto the ability to change the values of physical constants at will. The sum probabilities of these make the original 10exp.-30 seem like a dead certainty. This has to be among the most unscientific claim ever made.

Let's assume that the advanced civilization had managed to do all these incredible feats. The deliberate design and creation of a new universe is the greatest undertaking in the history of the universe; what benefit could it have for this advanced civilization? One can assume that it had a very good reason to undertake such a mind boggling enterprise and now that after thirteen billion years gestation it has come to fruition, what momentous result for the civilization is there that is worthy of the effort?

Einstein's relativity, Heisenberg's Uncertainty principle, and Alice-in-Wonderland quantum mechanics have induced scientists to believe anything is possible. Every conceivable hypothetical scenario however unlikely is worthy of consideration, except the theistic one.

Can hypotheses get any wilder? Consider another passage, which says: "When black holes evaporate, they do so in a random manner such that for any given physical object there is a finite (although, typically, astronomically small) probability that it will be emitted by any given black hole in a given time interval. Such things as boots, computers, or ecosystems have some finite probability of popping out from a black hole. The same holds true, of course, for human bodies, or human brains in particular states."

The author says there is a possibility that an exact replica of a human brain, or a whole human, together with a life memory, or any other conceivable object, will one day pop out of a black hole (never mind what the gravitational field would do to it).

Such zillion orders improbabilities, the closest we can imagine of the impossible, are proposed for serious consideration to counter cosmic fine tuning, but the probability for the existence of God, despite considerable circumstantial evidence, is dismissed.

There are several technical flaws in the above premise on black hole radiation. Firstly Hawking radiation has never been observed nor proven and some physicists question whether it actually exists. The theory behind it is that if a particle/anti-particle pair came into being at or near the event horizon of a black hole, one of them could fall in, while the other could escape.

It also assumes black holes have infinite life. A black hole of one solar mass according to Hawking's theory lasts 10exp.67 years but in absolute terms infinite time is required to realise the infinitesimally small probabilities involved.

Larger black holes emit lower radiation. A black hole of one solar mass has the black body temperature equivalent of one tenth of a millionth of a degree Kelvin.

Larger bodies have exponentially lower temperatures. Only minute black holes emit significant amounts of radiation, but they have short life spans. A black body with the mass of a small mountain lasts about 3 billion years, ending in a mega-nuclear explosion. Small bodies have life-spans too small to allow emission of large objects.

The author has ignored the basic premise of the theory, that the emitted particle or body must form spontaneously as a particle/anti-particle pair near the event horizon. Then one of them may fall in, while the other may fly away at the speed of light. This is conceivable for photons and neutrinos with no mass that cannot be crushed by gravity, but unlikely for shoes, computers, or Cadillacs.

The only other alternative, suggested by Bostrom, is for there to be an infinite number of black holes, but they would fill the universe and their gravitational fields would interact causing them to merge; the universe would turn into an infinitely massive black hole with a temperature equivalent of the absolute zero, thus with zero radiation.

The point is that in trying to discredit the theistic alternative, authors are resorting to the most ridiculous hypotheses imaginable. Circumstantial scientific evidence is increasing rather than decreasing the theistic scenario, but opponents of intelligent design continue to conjure fantastically silly hypothetical situations, with little regard to probability, in preference to the more obvious and much more likely explanation.

The advanced civilization requires a motivation, such as the imposition of its will onto the life forms of the new universe, (after all, a staggering effort was made to create it), in which case regulations may apply. Remember the universe has been specifically created and tailored by the super-advanced civilization to produce intelligent life, presumably mankind, thus there must be an agenda.

If rules are imposed, reward and punishment are probably involved. At some stage of this theory, a notable similarity may become apparent if the name of "advanced civilization" was replaced with "God."

Some physicists have suggested a new acronym for some of these more bizarre interpretations, derived from the Completely Ridiculous Anthropic Principle.

Can scientists conjure any wilder scenarios than this? The famous top physicist John Wheeler said: "The Universe starts small at the big bang, grows in size, gives rise to life and observers and observing equipment. The observing equipment, in turn, through the elementary quantum processes that terminate on it, takes part in giving tangible reality to events that occurred long before there was any life anywhere."

George Greenstein says: "The universe brought forth life in order to exist ... the very cosmos does not exist unless observed."

They say that the universe attains tangible reality only when observed by intelligent observers. Between the reality of the cosmos and the quantum theory, perhaps the quantum theory needs to be re-examined (see Hugh Ross' articles).

If this amazing premise is correct, for the cosmos with all its tumultuous heaving galaxies of mind-boggling proportions to attain reality, intelligent minds must observe it, (never mind that light from some of these galaxies takes ten billion years to reach us and another ten billion years for information about its observation to go back.) Human observation of the universe only started several thousand years ago by Babylonians, but the universe must have been under intelligent observation all along. The only candidate for that is God.

Secular scientists present a profusion of wacky, tacky conjectures, while articles by Ross are intellectual restoratives, refreshingly and solidly based on physics, devoid of baseless conjecture, and are gratifyingly devoid of hyperbolic flights of fantasy.

How ironic that theologians have become the rational party and scientists the dogmatic. When scientists were the underdogs, they were rational while the powerful clergy were dogmatic; now the humble theologians have become the rational party.¹

Bostrom proposes scenarios with zillion orders improbability, yet consider his astonishing conclusion on the theistic alternative: "Needless to say, it is possible to doubt the meaningfulness of many of these design hypotheses. Even if one admits that a given design hypothesis represents a coherent possibility, one may still think that it should be assigned an extremely low degree of credence."

Huh? How has he made this amazing deduction? Why is it to be assigned extremely low credence? No calculation or explanation is given, whereas functioning human brains, television sets, the Eiffel Tower, or even whole functioning eco-systems popping spontaneously out of black holes is presented as a viable possibility to dismiss cosmic fine-tuning.

The degree to which detractors grasp at straws, ignore basic rationality, and show such little respect for evidence and logic is truly amazing and can only be driven by intense prejudice.

As some scientists find these ridiculous hypotheses untenable, a white hope is being groomed: Superstring Theory. Usually in science, evidence comes first then deductions follow. Due to the emotional nature here (superstitious religion must not be allowed to succeed at any cost) conclusions come first; rummaging frantically for a viable theory to support them comes later, demonstrating weakness and desperation.

see Hugh Ross at: http://www.reasons.org/resources/apologetics/design.shtml#33

Anthropic Detractors

The three versions of the Anthropic Principle defined by Barrow and Tipler are:

- Weak Anthropic principle (WAP): "The observed values of all physical and
 cosmological quantities are not equally probable but they take on values
 restricted by the requirement that there exist sites where carbon-based life
 can evolve and by the requirements that the Universe be old enough for it to
 have already done so."
- Strong Anthropic principle (SAP): "The Universe must have those properties which allow life to develop within it at some stage in its history."
- Final Anthropic principle (FAP): "Intelligent information-processing must come into existence in the Universe, and, once it comes into existence, it will never die out."

The third principle is not taken seriously and may be disregarded. Hawking explains the other two: "According to the strong Anthropic Principle, there are millions of different universes, each with different values of the physical constants. Only those universes with suitable physical constants will contain intelligent life. With the weak Anthropic Principle, there is only a single universe."

Most opponents of a designed universe effect neutrality, but Tobin openly states his atheistic perspective. As one of the most rational, and honest opponents, his reasons for opposing the theistic alternative are considered here. He says: "It is by no means clear that our carbon based life-form is the only one possible given the current laws (and fundamental constants) of physics. In their book Life Beyond Earth: The Intelligent Earthling's Guide to Life in the Universe (William Morrow 1980), Gerald Feinberg and Robert Shapiro speculated on other forms of life that may be possible in this universe. Some of their speculations include plasma life, a non chemical based life form that may be possible inside the plasma environment of stars like the sun. These plasmobes are composed of patterns of magnetic force, together with groups of moving charges, in a kind of symbiosis. This is highly speculative but it does show that life forms may be possible without the formation of heavy atoms such as carbon and nitrogen. Our requirement that life be carbon based may be nothing more than "carbon chauvinism".

Tobin by his own admission has resorted to "highly speculative notions" to counter a scientifically coherent theory. In the past, evidence from science was confronted with conjecture from theology; this is now reversed.

In fact the theistic alternative makes no such requirement that all life forms are carbon based. On the contrary, the Scriptures categorically state other life forms exist that are fundamentally different to ours and which cannot be carbon based; examples are angels, spirits, devils, and ghosts, whose ethereal forms, invisible and unreactive with our carbon based forms, are much more suited to plasma than carbon based life forms.

The Koran states angels were created from smokeless fire, which is remarkably compatible with plasma. Carbon chauvinism is as solidly based on the Scriptures as the spurious flat earth, geocentric, and heliocentric allegations, exposing the weak case presented to confront intelligent design.

Tobin also says: "Furthermore our knowledge of physics and cosmology is far from complete. Nothing in our knowledge explicitly rules out the possibility of finding a grand unified theory that could account for these fundamental constants of the universe. If such a theory is found, there would be no need to suggest any further "fine tuning", just like Darwin's discovery of evolution did away with any teleological arguments based on the complex anatomical features of animals (such as the eye)."

By the same token, a future grand unified theory may not account for these fundamental constants, or it may not supply a secular interpretation for cosmic fine-tuning. One could make the opposite case that cosmic fine-tuning will remain a compelling case for intelligent design, because a theory explaining all these fundamental constants may never be found. It's better to wait till it's found before discussing its implications; another example of unscientific reasoning based on speculation.

He surreptitiously resorts to insinuating a similarity to evolution to develop an ambiance of doubt without actually presenting any facts.

Tobin continues: "Another scenario that had been suggested is the multiple universes scenario. This means simply that our universe is simply one of a large number of mini-universes in an infinite super universe. This is actually a simpler scenario than a grand cosmic fine-tuner. In quantum mechanics space-time foam without any matter or energy will experience random local quantum fluctuations. The cosmologist Andre Linde suggested that these fluctuations form bubbles that will inflate into mini universes with random physical characteristics."

Ours is not a mini universe. Many believe it could already be infinite, or will definitely become so in future; remember the finite dimensions calculated for the universe are only for the visible part. We have no idea about the invisible part that lies beyond 14 billion light years away. Even Hawking in his book "A Brief History of Time" was critical of the multiple universes explanation.

Tobin continues: "Finally the physicist Victor J. Stenger had shown that perhaps the fine-tuning of constants may not be that big a deal after all. In a program he called MonkeyGod, Stenger randomly put in different values for four fundamental constants; the electromagnetic force, the strong nuclear force, the mass of the electron and the mass of the proton. In the randomly generated 100 universes, many were able to have stars with long enough lifetimes for the

Compare this with the eloquent rational case by Ross at: http://www.reasons.org/resources/apologetics/design.shtml.

formation of heavy elements such as carbon and for life to evolve. As Prof. Stenger wrote: "I think it is safe to conclude that the conditions for the appearance of life are not so improbable as those authors enamoured by the anthropic principle would have people think." "

The level of insinuation here is more subtle. Of the more than 20 universal constants in cosmic fine tuning, Stenger has inexplicably chosen to use only four. By ignoring the other 16 constants, he has inexcusably decreased the probability of fine-tuning by a factor of ten million billion (10exp25).

In a further sleight of hand, of the dozens of factors affecting the development of life, he has only considered one: star longevity, the period of time sufficient for forming supernovae. Ignoring the other factors is very surreptitious and inexcusable.

When normally rational physicists resort to devious deceitful tactics, it demonstrates an insidious corrupt intention to shift controversial subjects towards a biased preconceived conclusion.

To conclude his case, Tobin gives the last word to Hawking: "The strong Anthropic Principle...runs against the tide of the whole history of science. We have developed from the geocentric cosmologies of Ptolemy and his forebears, through the heliocentric cosmology of Copernicus and Galileo, to the modern picture in which the earth is a medium-sized planet orbiting around an average star in the outer suburbs of an ordinary spiral galaxy, which is itself one of about a million million galaxies in the observable universe. Yet the strong Anthropic Principle would claim that this whole vast construction exists simply for our sake. This is very hard to believe. Our Solar System is certainly a prerequisite for our existence, and one might extend this to the whole of our galaxy to allow for an earlier generation of stars that created the heavier elements. But there does not seem to be any need for all those other galaxies, nor for the universe to be so uniform and similar in every direction on the large scale."

Here, Hawking invokes the tide of the history of science to back his case. Firstly, the foundation of modern science began with Copernicus, Newton, and Galileo, not Ptolemy. Their revolutionary advance was to base theory on *observable evidence*, rather than personal opinion.

Their momentous innovation was to describe natural events in mathematical terms, inspiring and defining the beginning of the modern scientific era. From Ptolemy up till then, theories were based more on personal opinions than evidence. In the West, science was dominated by the dictatorship of Aristotle.

Ptolemy's views were merely guesses. In an age where rhetoric played a greater role than evidence, numerous other theories existed that had more credibility at the time such as Atlas holding up the world on his shoulders.

There's little connection between Ptolemy and Galileo. There is no tide between the old system of conjecture and the new Age of Reason. A sudden discontinuous break is a more accurate description of Ptolemy's age of oratory and conjecture and the modern scientific age.

The evidence Hawking has presented here for his opposition to the SAP, or deliberately designed universe, is based on the tide of history, which is itself based on human fallibility. Most of the theories during this tide were wrong anyway.

A similar deduction is to say that the tide of human history has shown that the laws of physics are getting clearer and physical events more predictable; thus Heisenberg's Uncertainty Principle is refutable.

Galileo and Copernicus would have been mortified to know their works would be used against Christianity. Both were devout Christians, as were most of the founders of modern science, including the greatest of all, Newton, who also happened to be the most pious. Most of the top scientists in the Islamic world were also very devout.

The vast construction of the universe doesn't exist just for our sake. The Koran says there are other life forms, about which we know nothing and which do not resemble us; the Bible also implies it.

If many other intelligent alien life forms existed, it would still conform with the Scriptures.

From man's perspective, there is no need for all those other galaxies or the vastness of the universe, precisely because we assess them with human standards.

It's more sensible to evaluate a created entity not with the values of one of the created entities, but of their creator.

We might as well ask ants to evaluate the feasibility of dam construction. We would have to explain it's to produce electricity to power TVs, electric cookers and lights; all alien concepts.

They would be very sceptical of the mountains of earth moved and the vast energy and effort for such strange incomprehensible notions, but their inability to understand these hardly affects their viability.

The same applies to us in trying to understand the reasons for the vastness of the universe. Genetically we are infinitely closer to ants than to God, so this effect will apply even more to us.

Disbelief or perplexity by ants does not change the reality of electricity, TVs, or the viability of dams or nuclear power stations. Their feasibility is obvious for their creators, whether they divulge the justification to ants or not.

Instead of asking: "Why is the universe so utterly vast?" or: "Why is it so much greater than it needs to be?" a more pertinent question is: "Did the creation of the universe require much effort for its Creator?" or "Does a diameter of one billion or 14 billion light years make much difference for its Creator?"

The operator of a power station can produce a vast amount of energy with just a few lines of software. An ant might be amazed to observe how a few taps on the keyboard can generate an ant-mind-boggling amount of energy.

For all we know, the creation of the universe may require the equivalent of a few lines of software.

This is exactly what "A New Kind of Science" by Stephen Wolfram says. Its basic premise is that: "...it is conceivable that a single program could reproduce all the complexity we see in physics."

Brief Summary

Circumstantial evidence gives a staggeringly low probability for life to have formed spontaneously, implying a designed universe, which implies a Designer.

To provide an alternative to this unpalatable notion, the concept of the multiverse has been proposed, for which there is no evidence, (the name itself is a contradiction).

The substantial emotional component in the interpretation of physical evidence is a blatant anomaly in the tide of modern science. A rational stance, based on observed physical evidence, would allow for the *possibility* of a Designer, unless proven otherwise. This is dogmatically avoided due to strong historical prejudice on this subject.

Terrestrial Fine-Tuning

In addition to the extreme improbability of accidental cosmic fine-tuning, an even greater degree of improbability stems from Terrestrial Fine-Tuning. This involves parameters that have caused fine-tuning factors to develop on Earth, the Solar System, and our galaxy that are all precisely right for intelligent life to occur. (NB: the extremely low probabilities for accidental terrestrial fine-tuning suggest we are very unlikely to ever come across alien intelligent life.)

Compare the scientific and rational approach based on physical evidence presented verbatim from Hugh Ross's: "Design Evidences in the Cosmos", with the amazing degree of furtiveness and emotionally based irrational conclusions presented by its detractors above.

Table 2: Terrestrial Fine-tuning Parameters

- Galaxy size if too large: infusion of gas and stars would disturb sun's orbit and ignite too many galactic eruptions. if too small: insufficient infusion of gas to sustain star formation for long enough time.
- Galaxy type if too elliptical: star formation would cease before sufficient heavy element build-up for life chemistry. if too irregular: radiation exposure on occasion would be too severe and heavy elements for life chemistry would not be available.

- Galaxy location if too close to a rich galaxy cluster: galaxy would be gravitationally disrupted if too close to very large galaxy(ies): galaxy would be gravitationally disrupted.
- Supernovae eruptions if too close: life on the planet would be exterminated by radiation if too far: not enough heavy element ashes would exist for the formation of rocky planets. if too infrequent: not enough heavy element ashes present for the formation of rocky planets. if too frequent: life on the planet would be exterminated. if too soon: not enough heavy element ashes would exist for the formation of rocky planets. if too late: life on the planet would be exterminated by radiation.
- White dwarf binaries if too few: insufficient fluorine would be produced for life chemistry to proceed. if too many: planetary orbits disrupted by stellar density; life on planet would be exterminated. if too soon: not enough heavy elements would be made for efficient fluorine production. if too late: fluorine would be made too late for incorporation in protoplanet.
- Proximity of solar nebula to a supernova eruption if farther: insufficient heavy elements for life would be absorbed, if closer: nebula would be blown apart.
- Timing of solar nebula formation relative to supernova eruption if earlier: nebula would be blown apart. if later:: nebula would not absorb enough heavy elements.
- Parent star distance from centre of galaxy if farther: quantity of heavy elements would be insufficient to make rocky planets. if closer: galactic radiation would be too great; stellar density would disturb planetary orbits
- Parent star distance from closest spiral arm if farther: quantity of heavy elements would be insufficient to make rocky planets. if closer: radiation from other stars would be too great; stellar density would disturb planetary orbits.
- Z-axis heights of star's orbit if too large: exposure to harmful radiation from galactic core would be too great.
- Number of stars in the planetary system if more than one: tidal interactions would disrupt planetary orbits. if less than one: heat produced would be insufficient for life.
- Parent star birth date if more recent: star would not yet have reached stable burning phase; stellar system would contain too many heavy elements. if less recent: stellar system would not contain enough heavy elements.
- Parent star age if older: luminosity of star would change too quickly. if younger: luminosity of star would change too quickly.
- Parent star mass if greater: luminosity of star would change too quickly; star would burn too rapidly. if less: luminosity of star would change too slowly; range of planet distances for life would be too narrow; tidal forces would disrupt the life planet's rotational period; UV radiation would be inadequate for plants to make sugars and oxygen.

- Parent star metallicity if too small: insufficient heavy elements for life chemistry would exist. if too large: radioactivity would be too intense for life; life would be poisoned by heavy element concentrations.
- Parent star colour if redder: photosynthetic response would be insufficient. if bluer: photosynthetic response would be insufficient.
- H3+ production if too small: simple molecules essential to planet formation and life chemistry will not form. if too large: planets will form at wrong time and place for life.
- Parent star luminosity relative to speciation if increases too soon: runaway green house effect would develop, if increases too late: runaway glaciation would develop.
- Surface gravity (escape velocity) if stronger: planet's atmosphere would retain too much ammonia and methane. if weaker: planet's atmosphere would lose too much water.
- Distance from parent star if farther: planet would be too cool for a stable water cycle. if closer: planet would be too warm for a stable water cycle.
- Inclination of orbit if too great: temperature differences on the planet would be too extreme.
- Orbital eccentricity if too great: seasonal temperature differences would be too extreme.
- Axial tilt if greater: surface temperature differences would be too great. if less: surface temperature differences would be too great.
- Rate of change of axial tilt if greater: climatic changes would be too extreme; surface temperature differences would become too extreme.
- Rotation period if longer: diurnal temperature differences would be too great. if shorter: atmospheric wind velocities would be too great.
- Rate of change in rotation period if longer: surface temperature range necessary for life would not be sustained. if shorter: surface temperature range necessary for life would not be sustained.
- Age if too young: planet would rotate too rapidly. if too old: planet would rotate too slowly.
- Magnetic field if stronger: electromagnetic storms would be too severe. if weaker: ozone shield would be inadequately protected from hard stellar and solar radiation.
- Thickness of crust if thicker: too much oxygen would be transferred from the atmosphere to the crust. if thinner: volcanic and tectonic activity would be too great.
- Albedo (ratio of reflected light to total amount falling on surface) if greater: runaway glaciation would develop. if less: runaway greenhouse effect would develop.
- Asteroidal and cometary collision rate if greater: too many species would become extinct. if less: crust would be too depleted of materials essential for life.
- Mass of body colliding with primordial earth if smaller: Earth's atmosphere

- would be too thick; moon would be too small. if greater: Earth's orbit and form would be too greatly disturbed.
- Timing of body colliding with primordial earth. if earlier: Earth's atmosphere would be too thick; moon would be too small. if later: sun would be too luminous at epoch for advanced life.
- Oxygen to nitrogen ratio in atmosphere if larger: advanced life functions would proceed too quickly. if smaller: advanced life functions would proceed too slowly.
- Carbon dioxide level in atmosphere if greater: runaway greenhouse effect would develop. if less: plants would be unable to maintain efficient photosynthesis.
- Water vapour level in atmosphere if greater: runaway greenhouse effect would develop. if less: rainfall would be too meagre for advanced life on the land.
- Atmospheric electric discharge rate if greater: too much fire destruction would occur. if less: too little nitrogen would be fixed in the atmosphere.
- Ozone level in atmosphere if greater: surface temperatures would be too low. if less: surface temperatures would be too high; there would be too much UV radiation at the surface.
- Oxygen quantity in atmosphere if greater: plants and hydrocarbons would burn up too easily. if less: advanced animals would have too little to breathe.
- Seismic activity if greater: too many life-forms would be destroyed. if less: nutrients on ocean floors from river runoff would not be recycled to continents through tectonics.
- Oceans-to-continents ratio if greater: diversity and complexity of life-forms would be limited. if smaller: diversity and complexity of life-forms would be limited.
- Rate of change in oceans-to-continents ratio if smaller: advanced life will lack the needed land mass area. if greater: advanced life would be destroyed by the radical changes.
- Global distribution of continents (for Earth) if too much in the southern hemisphere: seasonal differences would be too severe for advanced life.
- Frequency and extent of ice ages if smaller: insufficient fertile, wide, and well-watered valleys produced for diverse and advanced life forms; insufficient mineral concentrations occur for diverse and advanced life. if greater: planet inevitably experiences runaway freezing.
- Soil mineralization if too nutrient poor: diversity and complexity of lifeforms would be limited. if too nutrient rich: diversity and complexity of life-forms would be limited.
- Gravitational interaction with a moon if greater: tidal effects on the oceans, atmosphere, and rotational period would be too severe. if less: orbital obliquity changes would cause climatic instabilities; movement of nutrients

- and life from the oceans to the continents and vice versa would be insufficient; magnetic field would be too weak.
- Jupiter distance if greater: too many asteroid and comet collisions would occur on Earth. if less: Earth's orbit would become unstable.
- Jupiter mass if greater: Earth's orbit would become unstable, if less: too many asteroid and comet collisions would occur on Earth.
- Drift in major planet distances if greater: Earth's orbit would become unstable. if less: too many asteroid and comet collisions would occur on Earth.
- Major planet eccentricities if greater: orbit of life supportable planet would be pulled out of life support zone.
- Major planet orbital instabilities if greater: orbit of life supportable planet would be pulled out of life support zone.
- Atmospheric pressure if too small: liquid water will evaporate too easily and condense too infrequently. if too large: liquid water will not evaporate easily enough for land life; insufficient sunlight reaches planetary surface; insufficient UV radiation reaches planetary surface.
- Atmospheric transparency if smaller: insufficient range of wavelengths of solar radiation reaches planetary surface if greater: too broad a range of wavelengths of solar radiation reaches planetary surface.
- Chlorine quantity in atmosphere if smaller: erosion rates, acidity of rivers, lakes, and soils, and certain metabolic rates would be insufficient for most life forms. if greater: erosion rates, acidity of rivers, lakes, and soils, and certain metabolic rates would be too high for most life forms.
- Iron quantity in oceans and soils if smaller: quantity and diversity of life would be too limited for support of advanced life; if very small, no life would be possible. if larger: iron poisoning of at least advanced life would result.
- Tropospheric ozone quantity if smaller: insufficient cleansing of biochemical smogs would result. if larger: respiratory failure of advanced animals, reduced crop yields, and destruction of ozone-sensitive species would result.
- Stratospheric ozone quantity if smaller: too much UV radiation reaches
 planet's surface causing skin cancers and reduced plant growth. if larger:
 too little UV radiation reaches planet's surface causing reduced plant growth
 and insufficient vitamin production for animals.
- Mesospheric ozone quantity if smaller: circulation and chemistry of
 mesospheric gases so disturbed as to upset relative abundances of life
 essential gases in lower atmosphere. if greater: circulation and chemistry of
 mesospheric gases so disturbed as to upset relative abundances of life
 essential gases in lower atmosphere.
- Quantity and extent of forest and grass fires if smaller: growth inhibitors in the soils would accumulate; soil nitrification would be insufficient; insufficient charcoal production for adequate soil water retention and absorption of certain growth inhibitors. if greater: too many plant and

animal life forms would be destroyed

- Quantity of soil sulphur if smaller: plants will become deficient in certain
 proteins and die. if larger: plants will die from sulphur toxins; acidity of
 water and soil will become too great for life; nitrogen cycles will be
 disturbed.
- Quantity of sulphur in the life planet's core if smaller: solid core formation begins too soon causing it to grow too rapidly —disrupts magnetic field. if larger: sold inner core never forms—disrupts magnetic field.
- Quantity of sea salt aerosols if smaller: insufficient cloud formation and thus inadequate water cycle; disrupts atmospheric temperature balances. if larger: too much and too rapid cloud formation over the oceans disrupting the climate; disrupts atmospheric temperature balances.
- Volcanic activity if lower: insufficient amounts of carbon dioxide and water vapour would be returned to the atmosphere; soil mineralization would become too degraded for life. if higher: advanced life, at least, would be destroyed.
- Rate of decline in tectonic activity if slower: advanced life can never survive on the planet. if faster: advanced life can never survive on the planet.
- Rate of decline in volcanic activity if slower: advanced life can never survive on the planet. if faster: advanced life can never survive on the planet.
- Biomass to minicomet infall ratio if smaller: greenhouse gases accumulate, triggering runaway surface temperature increase. if larger: greenhouse gases decline, triggering a runaway freezing.

Ross goes on to give numerical estimates of the probability for each factor involved to support life and calculates their sum probabilities.

Table 3: Estimate of the Probability for Attaining the Necessary Parameters to Support Life

	Parameter	Probability
1	galaxy size	0.1
2	galaxy type	0.1
3	galaxy location	0.1
4	star location relative to galactic centre	0.2
5	star distance from closest spiral arm	0.1
6	z-axis extremes of star's orbit	0.1
7	proximity of solar nebula to a supernova eruption	0.01
8	timing of solar nebula formation relative to supernova eruption	0.01
9	number of stars in system	0.2
10	star birth date	0.2
11	star age	0.4
12	star metallicity	0.05

13 star orbital eccentricity	0.1
14 star's distance from galactic plane	0.1
15 star mass	0.001
16 star luminosity relative to speciation	0.0001
17 star colour	0.4
18 H3+ production	0.1
19 supernovae rates & locations	0.01
20 white dwarf binary types, rates, & locations	0.01
21 planetary distance from star	0.001
22 inclination of planetary orbit	0.5
23 axis tilt of planet	0.3
24 rate of change of axial tilt	0.01
25 planetary rotation period	0.1
26 rate of change in planetary rotation period	0.05
27 planetary orbit eccentricity	0.3
28 surface gravity (escape velocity)	0.001
29 tidal force	0.1
30 magnetic field	0.01
31 albedo	0.1
32 density	0.1
33 thickness of crust	0.01
34 oceans-to-continents ratio	0.2
35 rate of change in oceans to continents ratio	0.1
36 global distribution of continents	0.3
37 frequency & extent of ice ages	0.1
38 asteroidal & cometary collision rate	0.1
39 change in asteroidal & cometary collision rates	0.1
40 mass of body colliding with primordial earth	0.002
41 timing of body colliding with primordial earth	0.05
42 rate of change in asteroid & comet collision rate	0.1
43 position & mass of Jupiter relative to Earth	0.01
44 major planet eccentricities	0.1
45 major planet orbital instabilities	0.1
46 drift and rate of drift in major planet distances	0.1
47 atmospheric transparency	0.01
48 atmospheric pressure	0.01
49 atmospheric electric discharge rate	0.1
50 atmospheric temperature gradient	0.01
51 carbon dioxide level in atmosphere	0.01
52 oxygen quantity in atmosphere	THE PART OF THE PA
53 chlorine quantity in atmosphere	0.01
54 iron quantity in oceans	0.1
55 tropospheric ozone quantity	0.1
56 stratospheric ozone quantity	0.01
	0.01
57 mesospheric ozone quantity	0.01
58 water vapour level in atmosphere	0.01
59 oxygen to nitrogen ratio in atmosphere	0.1
60 quantity of greenhouse gases in atmosphere	0.01

61 quantity of forest & grass fires	0.01
62 quantity of sea salt aerosols	0.1
63 soil mineralization	0.1
64 quantity of decomposer bacteria in soil	0.01
65 quantity of mycorrhizal fungi in soil	0.01
66 quantity of nitrifying microbes in soil	0.01
67 quantity of soil sulphur	0.1
68 quantity of sulphur in the life planet's core	0.1
69 tectonic activity	0.1
70 rate of decline in tectonic activity	0.1
71 volcanic activity	0.1
72 rate of decline in volcanic activity	0.1
73 viscosity at Earth core boundaries	0.01
74 biomass to minicomet infall ratio	0.01
75 regularity of minicometary infall	0.1

Dependency Factors Estimate: 100,000,000,000.

Longevity Requirements Estimate: .00001

The probability for all 75 parameters to occur by chance is about 10exp.-99.

The maximum number of planets in the universe is approximately 10exp.22; thus the probability for a planet to support intelligent life is the probability 10exp.-99 multiplied by the number of planets 10exp.22.

This gives a probability of 1 in a hundred thousand trillion trillion trillion trillion trillion.

There are about 10exp.80 atoms in the universe. If each of these atoms were replaced by a universe, only then would there be a likely probability of life emerging on earth.

Remember this probability is only for galactic and terrestrial fine-tuning. It doesn't include cosmic fine-tuning, which involves the values of physical constants. The cosmic fine tuning probability 10exp-30 must be multiplied to it. The resulting cumulative probability for cosmic, galactic, solar, and terrestrial fine-tuning comes to about 10exp.-130.

This does not include anthropological factors that eliminated the Neanderthals, or global warming, or the extremely low probability of the DNA molecule to have developed by chance.

Probabilities of tens of percentage points would be significant; 130 orders of magnitude should induce very serious reflection.

The emotionally based paralysis of logic among some scientists and philosophers is so great that 130 orders of magnitude probabilities are disregarded but 130 orders of magnitude improbabilities, such as frying pans and cars jumping out of black holes, are considered viable.

Of considerable significance is the fact that these same scientists and philosophers are quite rational on other subjects.

CHAPTER 8 PASCAL'S WAGER

Decision Theory

Decision Theory is among the few mathematical tools that lends itself gratifyingly to evaluating religious controversies, especially the most enigmatic of all: life after death. The most famous application of this is Pascal's Wager.

The mathematics is simple. In a lottery of one hundred tickets, the chance of winning is one per cent. For a prize of a thousand dollars, the present value of a ticket is equal to the prize money multiplied by the chance of winning: one per cent of a thousand dollars: ten dollars. Only if the ticket price is less than ten dollars, is it worth purchasing.

The same calculation applies to Pascal's Wager. Though very simple and mathematically valid, it's widely ignored.

Due to its importance in assessing the controversy and the scarcity of other mathematical tools, a more detailed analysis is presented.

The theory presents a solid rational basis for theism. The basic principles are straightforward:-

- 1) Infinity multiplied, divided, added, or subtracted by any number, remains infinite.
- 2) Infinity multiplied by zero is a finite number, which is indeterminate and may have any value.
- 3) The value of an eternal life of bliss in Heaven is infinity.
- 4) The value of eternal torment in Hell is negative infinity.
- 5) If Heaven exists after death, its *present* value is equal to its future value (infinity) multiplied by its probability.
- 6) If Hell exists, its *present* value is equal to its future value (negative infinity) multiplied by its probability.

The present value of a promised state is equal to its future value, infinity for Heaven, negative infinity for Hell, times its probability. If the probability for either case is any value greater than zero, then the present value of each is infinite, because infinity multiplied by any number, however small, remains infinite.

The extraordinary result is that if the probability of life after death is any value higher than zero, however small, the present value of Heaven is infinite. Proof of zero probability is impossible; thus whatever the value, even if remotely low, their infinite present value means they are as close as staring us in the face, as real as life, as close as our breath, and as certain as our existence.

Circumstantial evidence shows the probability is not extremely low, but actually quite substantial.

The outcome is straightforward and compelling; unless proven wrong, acceptance of the existence of life after death is imperative.

(An astonishing corollary paradox exists: even if the probability is proven to be zero, which is absolutely impossible, then the present value of life hereafter, the product of the probability multiplied by its future value, can hypothetically still be immensely high; very bizarre).

Pascal's Matrix

Pascal's Wager is a decision matrix, the simplest form of which is presented in Table 4. Two alternatives considered are: either God exists, or doesn't.

Table 4: Pascal's Decision Matrix

	God exists	God does not exist				
Belief in God	Infinite reward	Α				
Disbelief in God	Infinite punishment	В				

A and B are the costs incurred for each belief option, (sometimes called utiles). Since these are in this life, they are obviously finite. B is the cost incurred in complying with social and legal rules independent of religious morals. A is the cost of abiding by social and legal rules as well as religious obligations. A is usually greater than B, because religious rules are more restricting. A minus B is the cost incurred for belief in God. (A is highest for Muslims, whose obligations include five prayers and ablutions a day, a month of fasting, no alcoholic drinks, etc.)

A is usually greater than B, because believers abstain from worldly pleasures more than unbelievers. However evidence shows that believers are usually more content with their lot than others. Most reports show they are happier, less depressed, and live longer, so the value of A minus B may be minimal and could even be negative.

It turns out to be of no consequence anyway, because whatever its value, positive or negative, it disappears into insignificance when compared to the infinite present values of the reward and penalty.

This must be a source of comfort for believers of all ages. However greatly they suffer from persecution, war, poverty, and deprivation, the value of A minus B, the price of admission however great, becomes insignificant compared with the reward in the next.

The outcome of the matrix demonstrates the unequivocal imperative for belief in God. Pascal expounded this sublimely, appealing with great eloquence to the heart and solid mathematics to the intellect. Pearls of wisdom from his Wager are quoted in italics:-

"Now what harm will befall you in taking this side? You will be faithful, honest, humble, grateful, generous, a sincere friend, truthful. Certainly you will not have those poisonous pleasures, glory and luxury; but will you not have others?"

The loss is smaller than generally thought and the reward is infinite. It's hard to argue with that, especially with strong mathematical backing from the matrix. His appeal is similar to the Koran:

04:39: What harm could befall them if they believed in God and the Last Day and bestowed in alms of that which He has bestowed on them?

"I will tell you that you will thereby gain in this life, and that, at each step you take on this road, you will see so great certainty of gain, so much nothingness in what you risk, that you will at last recognize that you have wagered for something certain and infinite, for which you have given nothing."

"I would soon have renounced pleasure," they say, "had I faith." For my part I tell you, "You would soon have faith, if you renounced pleasure." Now, it is for you to begin. If I could, I would give you faith. I cannot do so, nor therefore test the truth of what you say. But you can well renounce pleasure, and test whether what I say is true."

Was any mathematical subject ever presented with more eloquence and beauty? The cost is small, the risk insignificant, the gains great, and the probability considerable, all vouched for by mathematics. He also alludes to the debatable value of A minus B verging to nothing.

Pascal stresses the gradual process of acquiring faith, not an abrupt onset following solution of the matrix. Faith is acquired after prevailing against inclinations of unrestrained pleasure. Its unbridled pursuit doesn't guarantee happiness anyway.

For those who try to excuse themselves from the decision, he presents this challenge that separates agnostics from bigots.

"We are fools to depend upon the society of our fellowmen. Wretched as we are, powerless as we are, they will not aid us; we shall die alone. We should therefore act as if we were alone, and in that case should we build fine houses, etc.? We should seek the truth without hesitation; and, if we refuse it, we show that we value the esteem of men more than the search for truth."

This raises the question what motivates us in life: opinion of others, or search for truth? The Wager admonishes re-evaluation of our order of priorities.

"The sensibility of man to trifles and his insensibility to great things indicate a strange inversion."

Irrational behaviour shows sensitivity to trivialities and insensitivity to important matters such as one's eternal destiny. He further exposes this perverse logic.

"For it is not to be doubted that the duration of this life is but a moment; that the state of death is eternal, whatever may be its nature; and that thus all our actions and thoughts must take such different directions according to the state of that eternity."

The duration of this life is a trifle, but thoughts and actions during this brief period affect our eternal destiny.

"Let them at least be honest men, if they cannot be Christians. Finally, let them recognise that there are two kinds of people one can call reasonable; those who serve God with all their heart because they know Him, and those who seek Him with all their heart because they do not know Him."

Such transcendent wisdom is rare in any age. Pascal appeals for honesty on the matter. Honesty is saying: "The matrix may be logical, but I choose to ignore it." It's also honest to say: "I don't care about the next world. I prefer this life, to do as I please restricted only by my own personal sense of morality, whatever the outcome." It's dishonest to try to discredit the outcome of the matrix with specious allegations. He stresses this is to reduce the effect of false assertions on the impressionable. This applies particularly on eminent scientists who object to the implication of Pascal's theory due to personal prejudice, but falsely maintain a facade of neutrality to discredit the theory. If the theory is valid, they are misleading those who look up to them for enlightenment.

"Nothing is more indicative of a bad disposition of heart than not to desire the truth of eternal promises. Nothing is more dastardly than to act the bravado before God."

Pascal appeals eloquently both to the heart and intellect.

His Wager is based on the following precepts:

- 1) No one should be uninterested about its eternal destiny. Indifference shows a sick disposition and is the ultimate folly.
- 2) The existence of God, life after death, Heaven and Hell, all can be neither proven nor disproved.
- 3) The probability for their existence is below one (cannot be proven) and above zero (cannot be disproved).
- 4) Their present value can be estimated mathematically with Decision Theory and evaluation of the matrix.
- 5) These give infinite values, which make the prospect of the next world as certain as the reality of this world, which may be an illusion anyway. Some

scientists say this world is a hologram projected from a two dimension plane.1

- 6) Unless the calculation is proven false, it is imperative to consider the viability of the Wager.
- 7) The burden to disprove it is on those who disagree; inability to do so generates a logical loop resulting in a rational lock on the theistic option.
- 8) However low the probability, the matrix unequivocally opts for the theist alternative. But considerable circumstantial evidence suggests the probability is substantially high.
- 9) Of course faith doesn't depend only on this algorithm. This is a recent intellectual exercise that has played a minimal historical role in the adoption of faith.

"We know then the existence and nature of the finite, because we also are finite and have extension. We know the existence of the infinite, and are ignorant of its nature, because it has extension like us, but not limits like us. But we know neither the existence nor the nature of God, because He has neither extension nor limits."

"If there is a God, He is infinitely incomprehensible, since, having neither parts nor limits, He has no affinity to us. We are then incapable of knowing either what He is or if He is. This being so, who will dare to undertake the decision of the question? Not we, who have no affinity to Him."

As finite entities, we have intractable difficulty in understanding infinity. The problem is greatly compounded if the infinite entity under consideration is our Creator, who has deliberately restricted our ability to understand it.

"God is or He is not." But to which side shall we incline? Reason can decide nothing here. There is an infinite chaos which separates us. A game is being played at the extremity of this infinite distance where heads or tails will turn up. What will you wager? According to reason, you can do neither the one thing nor the other; according to reason, you can defend neither of the propositions."

"Do not then reprove for error those who have made a choice; for you know nothing about it. "No, but I blame them for having made, not this choice, but a choice; for again both he who chooses heads and he who chooses tails are equally at fault, they are both in the wrong. The true course is not to wager at all.

"Yes; but you must wager. It is not optional."

There is no escape option. A celestial elegance of the theory is that both the Scriptures and the mathematical outcome of the matrix independently disallow indifference. A decision has to be made.

http://www.newscientist.com/article/mg20126911.300-our-world-may-be-a-giant-hologram.html.

The Age of Reason demands rationality in belief, but in practice this is rare. Few people adopt faith based on Pascal's Wager, even though mathematics demands it. The objective of evaluating the Wager here is to present a solid rational foundation for theism and to expose allegations used against it.

Gambling

Decision theory is the most rational method available to decide optimally between various courses. Statistics is the most powerful means available to predict the future especially where information is insufficient. Pascal derived his theory from years of gambling. He realised the same principles of decision theory and statistics he used in gambling could also be applied to other uncertain situations, such as whether there is life after death. He was intrigued to find that even in this most controversial of subjects; the pure application of rationality allows a meaningful cogent resolution, without resource to dogma.

But why isn't there general acceptance of the outcome? The answer is the same as for gambling. Gambling invariably involves loss, yet this is irrationally ignored. Denying life after death and engaging in gambling are irrational dogmatic stances both refuted by mathematics.

The mathematics of gambling is well understood, yet ignored by millions of gamblers. In casinos, game rules always favour the house. The longer time spent on gambling, the greater the certainty of losing. The only conventional way to maximise the chances of winning is to gamble for a short time only. Most people ignore the logic of this by engaging in extended gambling, often life long. (Mickey Rooney said he lost a dollar on a horse race forty years ago and spent over a million dollars trying to recuperate it.)

This irrational behaviour is due to the addictive rush of gambling. Gamblers extend the exhilaration by prolonging the duration of gambling, thus guaranteeing loss. It's a devilishly clever scheme. (The Koran says gambling is an abomination devised by the Devil.) Most gamblers deceive themselves in thinking they are playing to win. Unwittingly they play for the elusive adrenaline driven exhilaration, lacking from other normal activities; also to escape the emptiness of its withdrawal.

In ignoring Pascal's Wager, mathematics is subordinated to emotions. Just as gamblers' addiction to the thrill cause them to ignore statistics, which assures eventual loss, many ignore the logic of Pascal's theory, distracted by life's pursuit of pleasure, ensuring its eternal loss.

A celestial elegance in Pascal's equation is that except for the eternity of Heaven or Hell, no other value of infinity can be entered in this equation, because nothing else has a value of infinity. Everything in the Universe is finite. A finite entity can't grant infinity of anything. Only God can do so.

The logic for the necessity for Hell is apparent from the matrix. If Heaven alone is entered, one could viably shun the covenant, despite its infinite value reward. Some may find it feasible to sacrifice the pleasures of the next life, promised on credit, for the tangible pleasures of this world, cash. The threat of Hell pre-empts this opt-out option. If God created the universe as a backdrop for the battle between good and evil, such an easy escape clause would be inappropriate and flawed.

Opposition to Pascal's Wager

There is nothing more certain in life than its ending in death. Logic says if the probability of life after death is anything above zero, it deserves serious consideration. Circumstantial evidence shows convincingly the probability is well above zero.

Counter arguments against Pascal's Wager theory are compiled from the Stanford Encyclopaedia of Philosophy and "The Rejection of Pascal's Wager" by Tobin.

The asserted flaws presented by them are representative of all the criticisms published on the validity of the Wager. These are presented below verbatim in italics.

Premise 1: The Decision Matrix

1. Different matrices for different people. The argument assumes that the same decision matrix applies to everybody. However, perhaps the relevant rewards are different for different people. Perhaps, for example, there is a predestined infinite reward for the Chosen, whatever they do, and finite utility for the rest, as Mackie 1982 suggests. Or maybe the prospect of salvation appeals more to some people than to others, as Swinburne 1969 has noted.

The challenge presented against the rock solid mathematics of the Wager consists of baseless conjecture, i.e. there may be infinite reward for "the Chosen" and finite for the rest. The objective of the exercise is to rationally evaluate claims of the Scriptures, which says unambiguously the reward is infinite for all who go to Heaven.

The claim that duration in Heaven may be limited for some is baseless. The claim under evaluation from the Scriptures is that the reward is infinite. Perhaps another theory based on other scriptures gives finite reward, for which the finite value in the matrix becomes valid, but it doesn't apply in this case.

But let's assume for the sake of argument that the option of finite reward also exists. It still does not invalidate the matrix, but merely adds columns to it. The finite reward may have a duration of one or a trillion years.

Even one year in Heaven may be worth the cost of the abstinences. Whether it is or isn't can be evaluated from the matrix. Since the finite duration is not known, instead of considering numerous columns in the matrix, one for each year from

one to a trillion, one can calculate a "break-even point": the value of life in Heaven per unit time divided by the cost of faith.

Consider a simple example of the cost of faith:-

- one hour per day of prayer,
- twenty percent of income for alms (of say thirty thousand dollars income per year),
- abstinence from sinful fun worth twenty thousand dollars per year,

If we could get someone else to perform for us the chores of prayers, the fee could be say fifty dollars per hour. This gives about fifty thousand dollars per year, or three million dollars per lifetime.

An estimate must be made for the value of life in Heaven. At the best holiday resorts, total inclusive luxurious comfort can be had for say 1000 dollars per day. Total bliss supplied by God has to be worth at least ten times that supplied by man, thus giving a value for heaven of 10,000 dollars per day.

The break even point is three million dollars divided by ten thousand dollars per day, equal to 300 days or about one year. Thus if duration of life in Heaven were more than one year, adoption of faith becomes worthwhile. NB: It doesn't take into account the deterrence of Hell, which is worth millions of dollars per hour to avoid, or the fact that the pious generally have more contented lives than others, which imparts a negative cost to adoption of faith.

Based on the Scriptures, the duration of Heaven is infinite, thus there are only two alternatives: either there is no Heaven or it is for eternity. The claim that it is finite is totally baseless, but even if it were, the break even point is one year. If God has made the Universe a backdrop to this spiritual struggle, He is unlikely to limit the reward to just a year.

Another point of contention mentioned is that there may be "a predestined infinite reward for the Chosen whatever they do." Again this doesn't affect the basic premise of the Wager matrix. It merely raises the probability of reward for the "Chosen" to absolute certainty, but doesn't affect the others, including us.

The notion runs counter to basic principles of the Scriptures, which stresses that one's destiny depends solely on one's own actions and beliefs. Even if a fortunate group of "Chosen" existed, the individual still has to gamble whether he is in that group or not. Assessment of this probability leads back to Pascal's Wager anyway.

The other issue raised is more substantial: "What if the value of Heaven was different for different people?" The point that appears to be missed here is that infinity multiplied by any number is still infinity. If one person values salvation a thousand, or even a million times more than another, it is factored into the values for Heaven, but since this is infinite, the value will remain exactly the same: infinite.

The value of reward in the next world is independent of the degree of its appeal in this life. The value is infinity because of the infinite duration involved. A state of mild satisfaction has the same value as ecstatic bliss if both are for infinity.

A symptom of clinical depression is the total absence of hope for the future. In such cases, the appeal of Heaven will be low or perhaps even zero, giving a lower value in the matrix. But the clinically depressed in this world are unlikely to remain so in the next. Thus its true value will be the same as that perceived when cured of depression.

Some may say Heaven is boring, doesn't appeal to them, or they don't want to live in a constant state of bliss anyway. This could conceivably give Heaven a low value in the matrix. But firstly, the threat of Hell remains with infinite pain; a stronger deterrent is inconceivable. Secondly, the value of Heaven is not what we think of it now, but what we will think of it then. Our knowledge of it today is limited to speculation, unlike the knowledge of those who confront it first hand. The degree of bliss of Heaven is not dependent on one's perception of it now, nor does it change with fluctuations in mood. As a result, different matrices do not apply for different people.

An unlikely hypothetical situation is for an individual to prefer Hell to Heaven. This will reverse the signs in the matrix, making it imperative to be evil. In such a case, the masochist is usually mentally unfit, thus either will be cured or exempt.

2. The utility of salvation could not be infinite.

One might argue that the very notion of infinite utility is suspect---see for example Jeffrey 1983 and McClennen 1994. Hence, the objection continues, whatever the utility of salvation might be, it must be finite. Strict finitists, who are chary of the notion of infinity in general, will agree---see Dummett 1978 and Wright 1987. Or perhaps the notion of infinite utility makes sense, but an infinite reward could only be finitely appreciated by a human being.

The justification given for infinite utility being suspect is based on the following explanation (taken from reference 6 referred to above, by Jeffrey 1983 and McClennen 1994):

"Indeed, assuming that the probability of winning remains positive, you prefer the gamble to any finite reward; but if the probability of winning drops to 0, your preference discontinuously switches to the finite reward. The objection, then, is that infinite utilities run afoul of the underpinnings of decision theory (expected utility theory), and thus of the theory itself."

The objection stated here is that if the probability drops to zero, this will introduce discontinuity in the utility values, which runs foul of the underpinnings of decision theory. Firstly, contrary to what is implied, no valid explanation is presented that makes infinite utility suspect. Secondly, the concept of continuity in decision theory is an assumption. It is not a fundamental principle, without

which the theory cannot stand. Perhaps the theory needs modifications to allow both finite and infinite values. Thirdly, on the question of whether continuity is a requirement, the author cites two recent references that "give further positive arguments for allowing infinite utilities into decision theory." These cited references clearly contradict the authors' conclusions that "whatever the utility of salvation might be, it must be finite." Fourthly, and most important of all, for the probability assignment to be zero, it is necessary to prove conclusively that there is no Heaven (or Hell). The issue is not even attempted. This is because it is impossible; we simply do not have the facilities to do so. The data and evidence for it resides in another universe and in other dimensions, for all we know. If it were otherwise, i.e. if someone could demonstrate that they do or don't exist, there would be no need for Pascal's Wager anyway.

To say "strict finitists are chary of the notion of infinity in general" is simply conveying an emotion. Another group may feel the exact opposite; thus it becomes one man's word or emotion against another, which isn't much use. It would be better, if instead of conveying emotions, strict finitists conveyed how they reached their conclusion that infinity cannot exist. It would also be better and more productive, if the authors were chary of conveying emotions on mathematical subjects.

It is an odd precept that states nothing can be infinite. It implies we fully appreciate the notion, yet in the next line it says "what we consider infinity is perhaps only finitely appreciated." If we cannot appreciate the concept of infinity, it doesn't mean that it cannot exist. If we can view infinity only with a restricted finite perspective, then perhaps we are not in a position to make definite pronouncements whether it can or not exist.

In the space of only one paragraph several emotions and a contradiction are presented.

3. There should be more than one infinity in the matrix.

There are also critics of the Wager who, far from objecting to infinite utilities, want to see more of them in the matrix. For example, it might be thought that a forgiving God would bestow infinite utility upon wagerers-for and wagerers-against alike---Rescher 1985 is one author who entertains this possibility. Or it might be thought that, on the contrary, wagering against an existent God results in negative infinite utility. (As we have noted, some authors read Pascal himself as saying as much.) Either way, f_2 is not really finite at all, but ∞ or $-\infty$ as the case may be. And perhaps f_1 and f_3 could be ∞ or $-\infty$. Suppose, for instance, that God does not exist, but that we are reincarnated ad infinitum, and that the total utility we receive is an infinite sum that does not converge.

The point made here is that there should be more than one infinity, a positive one for Heaven and a negative one for Hell. Though Pascal may not have explicitly quoted a negative infinity in the matrix, it was inferred and has already been

incorporated here. It makes the case doubly more compelling, even though infinity multiplied by two is still infinity.

The Divine justification for the negative infinity is to eliminate an escape clause. If Heaven existed but no Hell, a safe viable option for dismissing all obligations could develop.

The case where God doesn't exist, but the soul reincarnates ad infinitum, begs the question of who supervises the transfer and allocations, or provides the driving force. The probability of such a case can be considered separately in another matrix for the specific evaluation of the theory of metamorphosis.

But before any data is entered into the matrix, it must first be shown to be viable. We cannot enter any value we fancy from any imaginable situation; otherwise I could promise eternal reward. "Get out of Hell Free" cards are sold on the internet.

The objective here isn't to consider every imaginable possibility, however improbable, but to assess the most viable theory available, which for the case of this treatise happens to be the Scriptures. (Physics is absolutely mute on the subject).

4. The matrix should have more rows.

Perhaps there is more than one way to wager for God, and the rewards that God bestows vary accordingly. For instance, God might not reward infinitely those who strive to believe in Him only for the very mercenary reasons that Pascal gives, as James 1956 has observed. One could also imagine distinguishing belief based on faith from belief based on evidential reasons, and posit different rewards in each case.

To say God might not reward infinitely those who adopt faith for mercenary reasons is groundless speculation. No such claim is made anywhere in the Scriptures, which is after all the subject of evaluation. If it said some will be rewarded for a hundred years and others for a thousand, or that Heaven has graded levels of comfort, then we could consider introducing such values into the matrix in extra columns, but it doesn't.

There is no incontrovertible evidence to prove the existence of God, thus it will not be possible to develop faith based solely on "evidential reasons." Faith is not so straightforward that it can simply be based on mercenary reasons. Those who adopt faith based solely on mercenary or evidential reasons will suffer life's severe afflictions anyway and be subjected to intense temptations to test the strength of their faith, just as Jesus was.

In addition to these, fasting, abstinence, jihad, charity, etc. all strongly opposing natural inclinations, will test the individual to the limit. Adopting faith from a quick calculation of Pascal's matrix is easy; maintaining it through trials and temptations isn't. It requires a war with the self, self-restraint, fortitude, patience,

perseverance, repentance, prayer and other chores. Otherwise the business of life would be over in days.

The reward isn't trivial. Severe afflictions are ordained for all, believers and unbelievers alike; unbelievers will be punished both in this world and the next, while believers will be afflicted to test their faith.

Some may begin with purely mercenary reasons, but life's crushing afflictions will soon test the strength and durability of their decision and faith. Pascal's Wager is an intellectual analysis, a mathematical tool in the rational evaluation of faith. Few base their beliefs on it. Faith is made of more serious stuff than solution to a matrix.

5. The matrix should have more columns: the many Gods objection.

If Pascal is really right that reason can decide nothing here, then it would seem that various other theistic hypotheses are also live options. Pascal presumably had in mind the Catholic conception of God---let us suppose that this is the God who either 'exists' or 'does not exist'. By excluded middle, this is a partition. The objection, then, is that the partition is not sufficiently fine-grained, and the '(Catholic) God does not exist' column really subdivides into various other theistic hypotheses. The objection could equally run that Pascal's argument 'proves too much': by parallel reasoning we can 'show' that rationality requires believing in various incompatible theistic hypotheses. As Diderot 1875-77 puts the point: "An Imam could reason just as well this way."

The criticism is valid. There would be a gaping flaw if the God of Christians is different from the God of Jews etc. Most religions consider their God to be exclusively their own and different from other gods, but Islam stresses there is only one God in the Universe, the same worshipped by all monotheistic religions.

The precept of monotheism is the most fundamental pillar of faith in Islam. The God of the Old Testament is the same as the God of the New Testament and other religions about which we know little. The Jewish or Catholic notion that their God is different from that of the other monotheistic religions is untenable and arrogant. Not even their Scriptures make such a claim.

The discrepancy presented above disappears when the God of monotheistic religions is the same. Islam is the only religion that affirmed from the beginning there is only one God that is the same God worshipped in other religions. This precept acknowledges that differences in religion are cultural and arbitrary. Christians can drink, not Muslims; but both worship the same God. The Sabbath must be observed by Jews, but not Muslims. Drinking is not an absolute sin, but an arbitrary restriction on Muslims. Religious strictures are means for the test, not absolute values pervading the cosmos.

The extent of religious regulations appears proportional to the degree of exposure to Divine admonishment. Where scriptures are flawed or nonexistent, the burden of faith is less. Christians have lax regulation on prayer, once a week or even

less. Muslims have a more viable Scripture and their prayers are a testing five times a day preceded every time with ablutions, and a gruelling one month fast. Regulations govern every aspect of their lives. Those with no Scriptures, such as Native Indians and Aborigines, have the lightest religious obligations, perhaps merely avoidance of major crimes.

The point referred to in the last line of paragraph 5 above is valid, though not applicable, because the Imam, Bishop, Priest, and Rabbi are all saying exactly the same thing. These religions are not conflicting theories; but on the contrary, their compatibility is a confirmation of the case. The incompatible ones are Buddhism, whose object of worship is a dead atheist, Shintoism, the worship of the Emperor of Japan as descendent of the sun-god, various idolatries, and assorted pagan religions, none of which furnish viable data for the matrix.

Premise 2: The Probability Assigned to God's Existence

1. Undefined probability for God's existence.

Premise 1 presupposes that you should have a probability for God's existence in the first place. However, perhaps you could rationally fail to assign it a probability---your probability that God exists could remain undefined. We cannot enter here into the thorny issues concerning the attribution of probabilities to agents. But there is some support for this response even in Pascal's own text, again at the pivotal claim that "reason can decide nothing here. There is an infinite chaos which separated us. A game is being played at the extremity of this infinite distance where heads or tails will turn up..." The thought could be that any probability assignment is inconsistent with a state of "epistemic nullity" (in Morris' 1986 phrase): to assign a probability at all---even 1/2---to God's existence is to feign having evidence that one in fact totally lacks. For unlike a coin that we know to be fair, this metaphorical 'coin' is 'infinitely far' from us, hence apparently completely unknown to us. Perhaps, then, rationality actually requires us to refrain from assigning a probability to God's existence (in which case at least the Argument from Superdominance would be valid). Or perhaps rationality does not require it, but at least permits it. Either way, the Wager would not even get off the ground.

The reasoning presented here is essentially as follows:

- 1) One may fail to assign a probability for the existence of God.
- 2) Thus to suppose that God exists may be invalid.

A similar assertion is that since we may fail to assign a probability for an asteroid impact, therefore to suppose that it will occur may be false. This is an astonishingly illogical attitude coming from eminent philosophers in a reputable publication. It's merely whistling in the dark, hoping the threat will disappear if ignored. The whole point of the exercise is to assess the probability of God's existence. To assume that He doesn't exist, then from that infer we cannot assess the probability of His existence is a amazingly weird irrational naïve deduction.

Resort to such specious assertions shows weakness and deviousness. Tied in logical knots, the author summons Pascal himself to gain credence. He quotes Pascal claiming reason can decide nothing here. But Pascal doesn't mean that the issue is indefinable and so we must refrain from assigning a probability, otherwise he wouldn't have spent a book doing exactly that. He meant the issue of whether God exists or not can never be proven by logical reasoning, in the way theories on geometry can.

By "There is an infinite chaos which separates us" Pascal is saying that an infinite chaos exists between us and the certainty of the existence of God, or in other words we have no hope of ever being able to *prove* His existence, (which also happens to be a basic premise of faith).

Where Pascal says: "A game is being played at the extremity of this infinite distance where heads or tails will turn up..." he means the game is being played at an infinite distance from the object of study, God. In other words, the result is beyond the scope of our vision. The author has misinterpreted this by thinking Pascal meant the coin tossing is being done at an infinite distance from us, then deducing from that: "rationality actually requires us to refrain from assigning a probability to God's existence."

This assertion would be invalid if the coin tossing is being done *here*, not at infinite distance. The author of the above claim says "this metaphorical 'coin' is 'infinitely far' from us, hence apparently completely unknown to us." If tossing the coin is at infinite distance, we would have zero knowledge about its outcome; but Pascal spends the next pages describing the evaluation process in detail, (coin tossing here is the analogy for matrix evaluation).

If he meant the coin tossing is at infinite distance, he would not try to evaluate the outcome. Clearly, he means the coin tossing is done here, whereas the object of our studies is at infinite distance. When the object under evaluation is close, we can evaluate the matrix and check the result for confirmation.

We can calculate the probabilities of drawing out a red sock from a drawer of red and blue socks. Then, we can test the experimental result for correlation with theory. Pascal stresses that Heaven and Hell are beyond reach, at infinite distance, thus we can never check the result but we can calculate the probability.

Once confronted with Heaven or Hell we cannot return to earth and make suitable adjustment. Also, since their net present value is infinite and the costs

involved are negligible, mathematics stresses we must assume they exist. Therefore, we must override our emotional and natural inclinations.

Coin tossing at infinite distance, besides being slightly ridiculous, implies the absolute futility of the exercise, which would contradict the message of his book, which is called: "Of the Necessity of the Wager." If a box containing coloured socks is at infinite distance, one can still estimate the probability of drawing a red or blue one.

Even if this was what Pascal meant, how has he made the astonishing leap from Pascal's claim of coin tossing at infinity to the pronouncement that rationality forbids us to assign any probability? The probability of red or blue socks being withdrawn from a drawer are the same whether done here or at infinite distance.

Anyway, is Pascal's authority so great that his simple analogy warrants overriding logic? Does Pascal have precedence over rationality itself? Pascal spent the whole book stressing that we *must consider the probability*. Doesn't his authority hold there?

The author consistently fails to appreciate that it is *not* necessary to assign an actual numerical probability. In fact the actual value of the probability is practically irrelevant; whatever the value of the fraction, the results will be exactly the same. Infinity multiplied by any probability will still yield infinity.

The only case where the results differ is if the value of the probability were zero. Thus to get meaningful results from the matrix, one need only determine whether the probability is zero or not.

To enter a value of zero requires irrefutable proof that God does not exist. The probability of obtaining that is zero.

2. Zero probability for God's existence.

Strict atheists may insist on the rationality of a probability assignment of 0, as Oppy 1990 among others points out. For example, they may contend that reason alone can settle that God does not exist, perhaps by arguing that the very notion of an omniscient, omnipotent, omnibenevolent being is contradictory. Or a Bayesian might hold that rationality places no constraint on probabilistic judgments beyond coherence (or conformity to the probability calculus). Then as long as the strict atheist assigns probability 1 to God's non-existence alongside his or her assignment of 0 to God's existence, no norm of rationality has been violated.

Strict atheists would insist on the rationality of a probability assignment of zero, wouldn't they? It makes things so much more convenient for them. They might also insist not being asked to supply hard evidence for it.

Where is the evidence that shows the probability to be zero? It would be very generous and beneficial for them to share this evidence with the rest of us, for which we will all be eternally grateful for settling the matter. Ninety percent of

the world's population appears to be totally unaware of such immensely important evidence.

The only evidence offered by the article is: "The very notion of an omniscient, omnipotent, omnibenevolent being is contradictory." Is that it? Does this prove without doubt that the probability assignment for the existence of God is zero? Not one in a thousand, mind you, or a million, or trillion, but absolute zero.

Does this mean that if God happened *not* to be omniscient, or omnipotent, or omnibenevolent, then the chances of His existence would abruptly increase? For example, if He were semi-potent, would the probability of His existence make a discontinuous jump from zero to a finite fraction?

From where have they deduced that God is omnibenevolent? How does the notion of Hell and eternal torment for much of humanity fit with omnibenevolence? One can hardly imagine anything more painful or horrifying.

Such blatant contradictions and flaws in their argument suggest a deficiency of evidence and rationality.

A devious attempt is made to supply spurious mathematical evidence: "a Bayesian might hold that for a probability value of zero, no norm of rationality is violated." By the same token, the Bayesian might hold that for a probability value of 99.99999% for the existence of God, no norm of rationality is violated either.

In other words, an expert in Bayesian statistics might allow a probability value of zero, or he might not. If a substantial part of its evidence is that it *might not violate the laws of physics or mathematics*, this doesn't impart much credence; instead it conveys desperation.

The same Bayesian might hold that for a Martian civilization to exist, no norm of rationality is violated either, but that is hardly convincing evidence that it does.

The astonishing feebleness of the evidence suggests there is not much more; the authors are scraping the barrel. The insistence of atheists for a zero probability is merely wishful thinking. Not only does it not impart any validity, it exposes the basis of their argument as the expression of an emotion, which does not impart validity. Such insistence without evidence is unjustifiable.

Using the same logic, theists may with equal validity insist on the exact opposite, that the probability for God's existence is one.

Physical evidence cannot confirm the case either way; the only logical outcome is estimation of the possibilities.

Premise 3: Rationality Requires Maximizing Expected Utility

Finally, one could question Pascal's decision theoretic assumption that rationality requires one to perform the act of maximum expected utility (when there is one). Now perhaps this is an analytic truth, in which case we could grant it to Pascal without further discussion---perhaps it is constitutive of rationality to maximize expectation, as some might say. But this premise has met serious

objections. The Allais 1953 and Ellsberg 1961 paradoxes, for example, are said to show that maximizing expectation can lead one to perform intuitively sub-optimal actions. So too the St. Petersburg paradox, in which it is supposedly absurd that one should be prepared to pay any finite amount to play a game with infinite expectation. (That paradox is particularly apposite here.)

Wouldn't it be nice if philosophers used plain English instead of hiding their flaws behind thickets of abstruse obfuscation?

The objection referred to here is that aiming for maximum expected utility may lead to sub-optimal actions, thus Pascal's Wager may be flawed. The objection may conceivably apply to cases where there are numerous options with many different levels of similar rewards in a multi columned matrix. It is difficult to see how sub-optimal decisions can be induced in this case from seeking to maximise utility. One is either for the Wager or against it; there is little scope for anything in between. There are just two utility expectation options, Heaven and Hell, which could not be further apart: infinite reward or infinite penalty.

The options are also clearly specified and delineated: belief in God, disbelief in God; there is hardly any position in between. Little scope for mistaken sub-optimal actions exists here (the term action refers to the decision making process). In such a clear cut case the objection doesn't apply.

Again another passage from Pascal is quoted for evidence:

"Finally, one might distinguish between practical rationality and theoretical rationality. One could then concede that practical rationality requires you to maximize expected utility, while insisting that theoretical rationality might require something else of you---say, proportioning belief to the amount of evidence available. This objection is especially relevant, since Pascal admits that perhaps you "must renounce reason" in order to follow his advice. But when these two sides of rationality pull in opposite directions, as they apparently do here, it is not obvious that practical rationality should take precedence."

The author has inexcusably taken the above quote out of context to support a notion that was not considered by Pascal, i.e. the possible opposition of practical and theoretical rationality. The actual context in Pascal's text is:

"But there is here an infinity of an infinitely happy life to gain, a chance of gain against a finite number of chances of loss, and what you stake is finite. It is all divided; wherever the infinite is and there is not an infinity of chances of loss against that of gain, there is no time to hesitate, you must give all. And thus, when one is forced to play, he must renounce reason to preserve his life, rather than risk it for infinite gain, as likely to happen as the loss of nothingness."

Following his insistence for considering the existence of God, Pascal says since the gains at stake are infinite, whereas the losses are only finite, then one must resolve to override one's natural propensity for self preservation. He stresses the necessity to avoid hesitation, to minimise the effect of naturally induced inclinations. Emotions and impulses, driven by the gut, should be suppressed in light of the infinite prospects exposed by the calculations, driven by reason.

The author infers that practical and theoretical rationalities can pull in opposite directions. In some cases they could conceivably do so, but not here. The difference between them is nonexistent, yet is presented as if a flaw is exposed.

Another false assumption is that Pascal's Wager alone is sufficient for faith. Its main use is to present a rational case in the scientific evaluation of theism, which is something its opponents are struggling to present, preferring emotion and dogma instead.

Piety involves more than a few minutes reflection on the outcome of the matrix. It involves a lifetime of trials, temptations, afflictions, calamities, regrets, and good fortunes. The extent and intensity of these will sorely test any conclusion made in a few minutes' reflection on Pascal.

By the way, an interesting reminder from the text is that we're all *forced* participants in the game, whether we want to or not. We are all combatants, armed with deep consciousness and conscience for the engagement. There is no escape clause; we are all fatally involved.

After examining the evidence of the theory with an open mind, and delegating the decision to our highest mental facility wisdom, while suppressing its antagonist prejudice, each must make this most private and potentially momentous decision.

It is in our constitution, our destiny, and our raison d'etre.

Rejection of Pascal's Wager

An openly atheist article "The Rejection of Pascal's Wager" by Paul Tobin¹ refreshingly is unambiguous in its perspective, unlike the Stanford Encyclopaedia of Philosophy which affects neutrality. Though he lists numerous flaws from the Bible, his conclusion is false. He says because the Bible has faults and because religion has caused a lot of suffering, ergo there is no God. He says that on accepting Pascal's theory "one becomes morally responsible for the propagation of suffering that Christianity had and will continue to bring upon the world." His concern is understandable, but his conclusion is not rational.

As Pascal was writing, people were gasping their last breath under torture or burnt by the Inquisition. Tobin says Pascal's stance strengthens the Church, more concerned with its rigid rules on abortion than the death of thousands of innocents in wars, or the sexual abuse of children by its clergy. But he is making judgment on absolute values based on temporal human failings. He doesn't appreciate the fallibility of all humans or the trial nature of life; no one is perfect. He thinks getting rid of religion will greatly alleviate human suffering.

¹ http://www.geocities.com/paulntobin/pascal.html.

He says: "But Pascal's argument is seriously flawed. The religious environment that Pascal lived in was simple. Belief and disbelief only boiled down to two choices: Roman Catholicism and atheism. With a finite choice, his argument would be sound. But on Pascal's own premise that God is infinitely incomprehensible, then in theory, there would be an infinite amount of possible theologies about God, all of which are equally probable. For we cannot measure the probability of the correctness of each theology when the subject they teach is supposed to be infinitely incomprehensible."

He then quotes a philosopher, Anthony Flew: "The main but not the only fault of the argument is that Pascal assumes that there are only two alternative bets; become a Roman Catholic or not. But on his own basic premise of total ignorance, the set of conceivable alternative cosmic systems, all of the hypothesis is equally probable, must be infinite, as must be the subset of those promising eternal bliss, and threatening eternal torment, respectively, to reward, and to punish an infinite range of different favoured and disfavoured way of life. This refutation is, on Pascal's own assumptions, decisive."

The point is valid if the only alternatives were just Catholicism and atheism, but this is not so. The alternatives are atheism and theism, which includes most of the world's religions. Polytheism is not considered for reasons previously stated; most are mutually exclusive and contradictory, scientifically non viable, have high probability of human fabrication, and are easily refutable. Besides they don't give values suitable for the matrix. Allocating a value for metamorphosis to a bird or insect is subjective. The deal breaker infinity is missing. Monotheism is the only viable option of theism.

They quote Pascal saying: "If there is a God, He is infinitely incomprehensible, since, having neither parts nor limits, He has no affinity to us."

From this sentence, they draw their main conclusion: since we know nothing of God, theoretically there could be an infinite set of alternative systems and an infinite range of rewards and punishment as well. Thus they deduce refutation of Pascal is decisive.

Problems with such deductions include:

- 1) Strictly speaking, Pascal's main concern is not whether God exists, which could easily become an unproductive exercise in intellectual abstraction, but whether there is Heaven and Hell waiting for us in the next world. If Heaven or Hell didn't exist, and if God has not imposed moral obligations or regulations on us, then the question of whether God exists would have the same relevance as whether there is a black hole in the middle of the galaxy. The main question, which they seem to have overlooked, is: "Is there a Heaven and Hell?"
- 2) Even if numerous sets of cosmic alternatives were possible, the deduction that the matrix becomes refutable is false. It would become *complicated*, but would still hold. It may become too complicated for the human mind to calculate or draw conclusions from, but the fact that an equation is difficult to solve does *not*

mean it is refutable.

- 3) The hypothetical case of an infinite set of reward and punishment is the worst case scenario envisaged by atheists in refuting the theory. But even in such a case, it would still become imperative to avoid sins, because the threat of punishment would still exist. Similarly, it would still become imperative to be virtuous, because there would still be reward for it. The argument is over the costs.
- 4) Pascal says God is "infinitely incomprehensible", but he does not mean we know nothing about Him. It means it is impractical to use a finite processor to comprehend an infinite entity about which we have little data and no direct evidence. However, we can infer some data about God: we know by creating the universe, He must be omnipotent and omniscient.
- 5) Though we can't be certain about the alternatives, we can still make rational estimates of the *probabilities* involved. If Hinduism claims the universe was created by a self dismembering Cosmic Cow, we can assign a low probability. If we had absolutely no knowledge about God, we would not be able to do that.
- 6) We can also assess probabilities concerning the infinite sets of cosmic alternatives. For instance, it is more likely that one God created the universe than a million Gods. A single God is more likely to have created the universe than a dozen Gods. We can also say an infinite number of Gods (as implied possible by Tobin) is unlikely to have created a finite universe (the probability is diminished by the fact that they wouldn't all fit in it).
- 7) We can assume God is omnipresent; otherwise He would be merely a roving spirit, smaller than His created Universe. It is also unlikely that He created an entity that is greater than Himself in size, energy, or power, thus in these aspects He must be greater than the Universe.
- 8) We can also assume it's quite unlikely that Gods could physically overlap each other. If God is omnipresent, only one God is likely. Conversely, if there are more than one God, they are unlikely to be omnipresent, thus are unlikely to have created a universe greater than themselves. Remember that when man creates something greater than himself, he is merely harnessing existing natural forces (greater than himself), transferring one form of material or energy into another. In the case of God, we are considering absolute creation of energy and matter from nothing. The highest probability reverts to our original alternatives: there is one God, the Creator of the universe, or it formed spontaneously. It's unlikely that a plethora of gods created the universe then separated each to adopt a human tribe. Also unlikely is a multitude of gods each created a different part of the universe then settled on earth for their abode, competing with one another for man's recognition. Wars of religions would be wars between gods, by proxy. Do gods really need humans to fight their cosmic battles? The concept of multiple gods proposed by mutually exclusive idolatry or by polytheistic religions become increasingly untenable the more they are analysed.

CHAPTER 9 THE EXPOUNDED THEORY

Theory Outline

Basic tenets of the theory can be summarised:

- Tenet 1: The Koran is the Word of God dictated to Mohammad, who merely transcribed it.
- Tenet 2: The text of the Koran has not been corrupted or changed since its compilation by the Caliph Othman.
- Tenet 3: The Bible is a Heavenly inspired book. Some passages have been corrupted through unintentional or deliberate changes through the ages. The Avesta was probably Heavenly inspired but has become excessively corrupted.
- Tenet 4: The existence of God can never be proven or disproved, (in this world).

Brief

- There is only one God, the Creator of the Universe, the same God of all monotheistic religions, for Muslims Allah, for Jews Jehovah, for Zoroastrians Ahuramazda, for Native Americans the Spirit in the sky, the God of Unitarian Christians, and the same God worshipped by Jesus.
- God created mankind for a purpose, imposing arbitrary rules as specified in religions.
- This life is a trial, a subsidiary precursor for the next.
- For the purpose of the trial, humans have been endowed with deep consciousness, free will, conscience, ethics, moral awareness, and wisdom, the ability to discern between good and evil. This explains why humans have them, but animals don't. It also explains the profound difference between them that is genetically unjustified and contravenes basics of evolution.
- Many prophets have been sent including Abraham, Moses, Jesus, and Mohammad, the last of the prophets.
- Every life form on earth is doomed to die.

- Humans are endowed with immortal souls.
- At an unknown date all mankind will be raised back to life, rejoined with their souls, and held accountable.
- The good will be rewarded with eternal life in Heaven, and the damned eternal torment in Hell.

Unlike purely scientific evaluation of previous chapters, in the following chapters basic coherence and integrity are evaluated. (Bold text is from the Koran and bold italics from the Bible)

Nature of God

57:02 His is the kingdom of the Heavens and the earth. He ordains life and death and has power over all things. He is the first and the last, the visible and the unseen. He has knowledge of all things.

This summarises some fundamental precepts: God is omnipotent and almighty, Alpha and Omega, the first inconceivable beginning, the last inconceivable end. We cannot understand the nature of God. We can only aspire to knowledge within the universe; outside it is purely speculative.

Insects can't appreciate the human aesthetics, literature, music, or art; they lack the hardware and mind for it. Just as they are oblivious of the facilities they lack, we are unaware of the facilities we lack to understand the nature of God.

Viruses, bacteria, vegetables, insects, reptiles, fish, small and large mammals, apes, and humans: each stage increases in sophistication as it develops more senses and enhanced awareness. Each stage is unaware of the increased sophistication of subsequent stages, and cannot appreciate its limitations compared with the next. We see ourselves as the most sophisticated life form, but by precedence there may be more stages of sophistication we're totally unaware of or unable to appreciate. Instead of the above ten stages, many more may exist where humans would be among the less developed.

The secular perspective that humans are the most advanced life form in the universe is unproven.

Compared with apes, a mere half-kilogram of extra brain mass has allowed humans to develop language, literacy, abstract thought, art, ethics, conscience, deep consciousness, awareness of the supernatural, and cognisance of God. Could another half kilogram induce another wondrous quantum leap, about which we can barely speculate? Would it allow perception through the supernatural fog? Would it allow us to see angels and ghosts?

The famous physicist Hawking said he understands how the mind of God works, showing that famous scientists can be as silly as the rest of us. In response a Time magazine editorial said scientists are only just beginning to understand how the brain of the sea slug works, not its mind, mind you. (The sea slug is a popular

subject for studying the working of the brain as it has one of the simplest most accessible brains). How ironic that millions of illiterate people around the world understand better than the top physicist that we lack the faculty to understand the mind of God.

We see ourselves vastly removed from worms, but we share fifty percent of DNA with them but none with God. Our brains are physically much closer to worms' than God's; thus a case can be made that worms are more likely to understand how our minds work than we are of God's. Our greater similarity to worms than to God suggests there may be an immense gulf between the levels of conceptual knowledge man has, and the amount it could have if it had more senses and sufficient brain capacity to process them.

The presence of God on our senses may be similar to the effect of coloured light on worms. They feel it vaguely as a form of heat, but if the light is from a painting, they can't discern the colours, differentiate the shapes, appreciate the beauty (unless modern art) or evaluate its aesthetics.

We fail to appreciate there could be many more senses than our basic five. If there are, can we comprehend that we lack them or what their nature is. Are we like worms clueless about how many more senses could exist? Animals have more senses than humans: sharks use electrical field sensors to detect prey, pigeons use magnetic field for navigation; others use IR, UV, infrasound (very long wavelength) and ultrasound.

Consider the increased awareness humans have developed compared with seasugs brought about by a kilogram of neurons and two or three more sensors. Similar exponential increases may be possible with several more kilograms and sensors. What if this increase were two kilograms, or perhaps five? Even if it brought vast increase knowledge, we would still be immensely removed in extent, substance, and dimension.

Looking back from the great advances humans have made, the limits of our mental faculties can easily be overlooked. We fail to appreciate how close we are to animals in every way except in the extraordinary qualities of free will and spiritual awareness.

The more animals are studied, the greater their similarity to humans in almost every way becomes apparent.

We cannot disprove the existence of aliens with much greater intelligence than ours. Such aliens may be as advanced relative to us as we are to worms. They may have qualities that we cannot even imagine; just as most animals, who don't have self awareness and cannot recognise themselves in the mirror, cannot appreciate the profound entity of self awareness and deep consciousness

But they would still be much more limited than the unlimited extent of God's knowledge.

Nature of Man

Are we creations of Nature or God? This more than anything else determines the fate of humanity. If we are accidents of Nature, an indefinable part of our consciousness may sense a dissonant flaw: the humblest life forms, flies and worms, have infinite more intelligence than Nature itself, which begetter of everything including intelligence remains itself the dumbest entity.

Is complex life, in all its dazzling sophistication, a creation of deaf, dumb, and blind unknowing Nature?

Its probability would increase if deep consciousness and conscience were a natural occurrence among other life forms. Its amazing uniqueness to humans shifts the probability towards deliberate design.

It also fits perfectly with our theory of the role of humans. It's difficult to explain otherwise how and why deep consciousness, conscience and ethics developed, or the role they play in evolution or in the preservation of genes. If they do have advantage, we would not be the only life form to have them.

Important evolutionary features do not become unique to a single species. The conferral of many fundamental features uniquely to humans is a blatant evolutionary aberration. This is particularly thought provoking since humans share 50% of DNA with bananas and single celled yeast. The low probability of accidental acquisition of each of these unique features contrasts with the imperative of Nature to distribute beneficial evolutionary characteristics to as many species as possible. Nowhere does Nature intentionally limit development. In fact, it is totally incapable to do so.

Their uniqueness to humans suggests deliberate bestowal, which suggests intelligence, which Nature is totally devoid of.

Theist/Atheist Dichotomy

29:44 God created the Heavens and the earth to establish truth.

45:22 God created the Heavens and the earth to reveal the truth and to reward each soul according to its deeds.

46:02 It was to manifest the truth that We created the Heavens and earth and all that lies between them; We created them to last for an appointed time.

64:03 He created the Heavens and the earth to manifest the truth, and fashioned you into a comely shape. To Him you shall all return.

67:02 He created life and death that He might put you to the proof and find out which of you acquitted itself best.

A historical quest of philosophers has been to find meaning to life, man's role on earth, its destiny, and absolute truths. From idol worship in ancient Babylon, Assyria, Egypt, Greece, and Rome through to recent centuries, most failed

miserably. Most religions and philosophies today are hard-pressed to present viable explanations.

Philosophies were rarely built on preceding ones. Instead, new philosophies tended to displace those before and discredited them, until they in turn became discredited and displaced by others.

The trend suggests that firstly there wasn't much merit in them to begin with, and secondly rather than being the result of objective searches for Absolute Truths, they are notions shaped by social or cultural vagaries of the age.

For example, the communist philosophy of class struggle developed as a reaction to the exploitation of the working class during the Industrial Revolution by capitalist parasites; but as exploitation decreased and affluence increased, its driving force depleted. As command economies failed to compete with free market economies, the underlying philosophy lost credence. Yet millions fought and died for it, and hundreds of millions based their lives on its verity.

Nietzsche's philosophy dispensed with the morality of good and evil, replacing it with the morality of strength and weakness. This gave the strong a clear conscience and the moral grounds to oppress the weak.

Validity for the morality of good and evil depends on the existence of God; otherwise Nietzsche's morality of strength and weakness is as valid as any other.

The pattern is repeated through the ages, one set of gods replaced another; Christian gods replaced Olympian gods; the Enlightenment displaced theocracy.

Secular humanism emerged in reaction to the animosity, persecution, and wars of Christianity. The creed didn't develop independently on intrinsic merit or absolute values. Without the abuses from religions, atheists have little to write about.

Neither science nor atheists can disprove the existence of God; a fundamental fact rarely addressed. Thus in their conviction, atheists are culpable of the same charge they accuse theists of; dogma.

To eliminate this gaping flaw, atheists have recently redefined atheism, retrenching (very reluctantly) from their previous positive assertion: "There is no God," which they now realise has become rationally untenable, to "There may be a God, but we don't believe it," which is a much weaker, more negative stance. The subtle change induces a major shift in argument.

In the solid assertion: "There is no God", the burden of proof is fully on the atheist, but they have failed completely to come up with the slightest evidence. A major failing of atheism is the glaring incompatibility of the strength of their conviction with the evidence supporting it.

Unable to unravel the knot, they have come up with a Gordian solution. By downgrading their position to: "There may be a God, but we don't believe it", atheism has apparently rid itself of this flaw. The new definition throws the

burden of proof into the theistic camp.

Even though an internal stipulation of theism, indeterminacy, precludes proof, resolution is possible by estimating the probabilities based on circumstantial evidence such as cosmic fine-tuning, terrestrial fine-tuning, cogency of the theory, spiritual awareness, and spiritual feedback.

However, considerable problems persist even with the new definition, the new revised cornerstone of atheism:

- 1) The new definition is a quantum change in attitude, a clear break from its definition maintained for centuries. Is this an admission they were wrong all this time? The basic monotheist creed hasn't changed in millennia.
- 2) It is a substantial retreat from a position of certainty that there is no God, to a confession that He may exist.
- 3) An inherent contradiction exists between two parts of the same sentence. The first part accepts the possibility of the existence of God, but the next part refuses to contemplate it, which is irrational and absurd. The second part is merely the expression of an emotion that is illogically unjustified by the first.
- 4) What a feeble theory; its newly refined maxim in only ten words contains a gaping contradiction. Can't atheism compose a single sentence to define their core belief without a blatant contradiction? They should remember this when they next find a contradiction in the Bible of 780,000 words.
- 5) Since the new definition actually allows for the existence of God, atheists must acknowledge the possibility, but they refuse to do so.
- 6) They can no longer insist on total repudiation, though this is far from how they feel, exposing a discrepancy between the letter and spirit of the creed.
- 7) The new definition moves atheism into the territory of agnosticism; but unlike agnostics, they adopt an unjustifiable fierce emotion in refusing to accept the possibility for the existence of God.
- 8) The literal interpretation of the maxim says they aren't sure, but insistence of certainty demonstrates confusion.
- 9) Ironically, acceptance of the possibility for the existence of God technically draws their position considerably closer to theism. The previous 180 degree diametric opposition has been reduced to differences in probability percentage points.
- 10) The more rational both sides become, the smaller these percentage differences will become. The apparently three divergent views of atheism, agnosticism, and theism actually merge together the more rationally they are considered.
- 11) Since the possible existence of God is acknowledged, atheists should take into consideration the mathematical inference of Pascal's Wager, which says if

there is a finite possibility for the existence of God, however small, faith becomes a mathematical imperative.

- 12) Circumstantial evidence, such as cosmic and terrestrial fine-tuning, shifts the probability of deliberate design considerably towards theism, whereas the previous definition was immune to such inferences.
- 13) Atheism has traditionally been the counter argument to theism. By weakening itself through this new definition, it automatically strengthens the case for theism. In absolute terms they are mutually exclusive, thus the weakening from self-induced retrenchment moves it inevitably towards theism.

Human Perspective

In the search for absolute truths, one should appreciate that a purely human perspective may not be the most suitable. Its limited scope steeped in materialism, hard-wired by emotions, developed over decades of social and cultural conditioning, is too restricting. Most are unaware of or indifferent to their natural prejudice, which requires a vigorous effort to overcome.

If we are creations of Nature, Absolute Truth does not exist, nor is there any meaning to life. Life is an accidental development writhing in various degrees of sophistication for survival. The value of life, and everything else, is only that given to it consensually or individually. Ethics, faith, piety, charity, etc acquire only the value given to them by humans. Animals also have viable claims on the value of their lives; the fact that they can't convey this to us doesn't invalidate it.

If we are creations of Nature, for all man's intelligence and wit, the common beetle is a more successful species in terms of endurance, having survived 60 million years *more* than humans. (Many doubt humans can survive many more millennia or even centuries, probably being the cause of their own destruction, let alone a million years).

The top life form till a few millennia ago was debatable between humans, insects, or rodents. In a giant asteroid strike or a nuclear Armageddon, the order of survivability will be insects, rodents, and no humans. (On a geological time scale, scientists consider a massive catastrophic asteroid strike imminent.)

In trying to evaluate the meaning of life, a better approach may be to attempt to adopt the perspective of God, by definition the Creator of the universe, the meaning of life, and everything else. It's either that or dumb Nature, which has no perspective, no knowledge, and no consciousness. An accurate view of God's perspective is impossible. We don't know how the mind of God works, but even an attempt to see things from His view could be beneficial.

Adoption of the perspective of the Creator is eminently preferable when trying to make sense of the universe. A solely human-centric perspective implies the universe was created only for us or must appeal to our taste (which varies substantially every decade anyway).

In adopting God's perspective, it becomes apparent that every action of every subatomic particle to galaxy clusters, from the instant of creation till its end is totally predictable. Hypothetically even humans could predict every action in the universe if sufficient computing power was available and all the laws of physics were known. Every snowflake or leaf, every occurrence greater or smaller, is as predictable and obvious for God, as tomorrow's sunrise is for man. (This is the most certain prediction we can make; any change to tomorrow's sunrise is scientifically inconceivable.)

This could make the universe indescribably boring for God (NB the time frame is infinite), even though this is a human emotion. This state of utter predictability is broken by the introduction of free will; its raison d'etre. Other requisites are the trial nature of life, (there's little point in free will if no decisions are involved), ethics (the awareness of good and evil), wisdom (the ability to discern between them), conscience (for grappling with ethics), deep consciousness (for understanding the issues involved), religious regulations (rules of the game). Free will allows freedom to move with these necessarily in a state of indeterminacy.

Free will is the ability to think and act beyond environmental and genetic predispositions, which have developed solely for survival, self preservation, and propagation of genes.

In the fields of free will of the human mind, battles rage between good and evil; arbitrary entities created for the purpose. Significantly these play no role in evolution. The outcome determines the fate of the individual.

Nowhere else is there any sign of free will, good and evil, deep consciousness, or morality, but only predictive reaction of all inanimate objects to physical forces, and a little more sophisticated reaction from animals and vegetation.

All life forms, except humans, appear to act precisely the same: every aspect of every action, consciously or not, is directed towards self preservation, adaptation, and propagation of genes. (Those that didn't died out). No activity is observed of any life form that is not directed by these evolutionary diktats.

The laws of physics and the forces of nature govern every aspect in the universe except human free will. It suggests deliberate design and imparts considerable coherence and cogency to the theory.

Though free will appears only in humans among the millions of known species, there may be many other life forms we know nothing about that are similarly engaged. The Scriptures explicitly state other life forms exist, which are similarly involved

The Vastness of the Universe

The vastness of the universe is a perpetual source of scepticism and disbelief. Why is it so utterly mind-boggling vast? How can its size ever be justified? To make sense of it, one must adopt the perspective of its Creator, instead of one of

its insignificant minion. It then becomes easier to see how the vastness of the universe of Earth is irrelevant to infinitely powerful God.

The scale of the universe is staggering because the subconscious instinctively estimates the effort and energy involved in its creation. This plays an important role in how we view all objects in the material world. When the size is beyond our scale of comprehension, the result is bewilderment.

The vastness of the universe appears totally incompatible with the scale of life on earth, which presumably has been endowed with so much importance by God. Confusion results in trying to rationalise the size of the universe with man's role in it, because the energy and scale seem absolutely incompatible with the objective.

The energy to produce the universe is vast on our scale, but small for God, who straddles universes. If the universe is not infinite, then for infinite God the size is immaterial, however immense, otherwise He would have made it much smaller to save effort and energy. From the perspective of God, the size and energy of the Universe are of little consequence. The real problem is our intractable inability to appreciate the infinite.

The size and energy are of less consequence for its Creator than the total predictability of everything. To relieve this state of utter predictability, free will is introduced for at least one life form, together with Indeterminacy. Neither one without the other would be rational for the trial. Indeterminacy is not available for angels, nor is free will for animals. Humans are uniquely endowed with both, together with other unique features necessary for the trial: deep consciousness, conscience, spiritual awareness, and morality.

These make the human mind the ideal battleground for the unpredictable outcome of the combat between good and evil, arbitrary entities created for the purpose.

The extraordinary fit of these coincidences with our theory imparts considerable coherence and cogency, which together with the substantial circumstantial evidence suggests deliberate design.

If we are accidents of Nature, these extraordinary coincidences are inexplicable, even violating basics of evolution, and a coherent theory to explain them is totally lacking; especially considering man's extensive physical and genetic similarity to animals.

The unique free will, the innumerable pastimes, the unrelenting allure of temptations as diversions, are all perfectly tuned for the engagement. The shortage of these in all other life forms enhances coherence.

Considering the great importance of the battle and the indefinite distance of the reckoning in the next life, the rewards and penalties are commensurately infinite in compensation.

In our practicality, conditioned by eons of physical contact with the material world, spiritual feedback is ethereal and of minor importance; its alleged reward is in another world at an indefinite time. In comparison, material reward for physical action is felt forcefully here and now.

For God the opposite applies. Physical forces are insignificant; obedient unwavering vassals of His creation. Spiritual forces, granted independence of His direct control, take on profound significance and importance. From a human perspective, an infinitesimal part of the cosmic forces that churn galaxies could vaporise the solar system in a flash.

From God's perspective, spiritual values bestowed on trust, temporarily granted freedom from His direct control, and how we deal with them in a state of free will are more important than dumb physical forces, which are unable to do anything but obey the laws of physics, which are in turn are His creations.

The human mind is the only known interface between the physical and spiritual worlds; animal and vegetative life forms are unburdened with spiritual awareness.

We are hardly in a position to make definite judgment on the appropriate size of the universe. Our powers of creation are vastly smaller, our appreciation of the infinite inadequate, and we are utterly incapable to ordain or create *eternal* values of any sort.

Other life forms such as insects would be totally at a loss to justify human actions using *their* values and their perspective.

For God, a universe the size of the solar system or many times bigger takes the same effort. The effort involved for God may be equivalent for us of tapping a few lines of a computer program. The huge physical energy consumed for tourism, mankind's greatest industry, is utterly baffling for insects, who would be bewildered by the driving forces driving it: business, entertainment, fun, recreation, sightseeing, wanderlust and sun bathing.

It would be disingenuous if one day, using powerful telescopes, one could discern angels fluttering about near the gates of Heaven. Perhaps one could then send a spaceship to investigate.

Sceptics need to determine what is a proper size for the universe from a human perspective, a galaxy, the solar system? What are the criteria to determine a proper size? Should the size of the universe meet human criteria of suitability? Should human engineering projects appeal to ant criteria? Anyway, there may be many alien species in every galaxy involved just as we are.

Another source of scepticism is time. Why wait so long? It's of little consequence the universe started fourteen billion years before the temptation of man, or fourteen thousand years ago. God created time.

As Bertrand Russell said, we cannot disprove God didn't create the Universe, together with all our collective memory, ten minutes ago. What would be God's hurry anyway?

Evaluating God's values using human standards is inherently untenable. It implies human perspective is on a comparable scale with God's and His actions in shaping the Universe should appeal to our sense of proportion and suitability; a preposterous presumption.

If we dispose human perspectives and values, we can then better speculate what is of interest for God. In the state where everything is totally and utterly predictable, the entity of free will introduces a profoundly different dimension.

How strange that in the indefinite vastness of the universe we alone are endowed with the extraordinary quality of free will. How strange that we alone are uniquely endowed with deep consciousness, conscience, and spiritual awareness, none of which is scientifically explicable.

How significant that it violates the theory of evolution, which as a rule does not confer important beneficial traits exclusively on one species only. If it is damaging to our species, as atheists assert, why does the most "successful" species alone have it?

Though explicit signs, to prevent contravention of indeterminacy, other explanations must necessarily become available, but so far little explanation exists why humans alone are endowed with the spiritual entities of ethics, morality, right and wrong, virtue and sin, piety and disbelief, justice and injustice, ethereal awareness of the supernatural, religious laws, and the ritual of prayer; all strangely absent in animals.

Are all these strange coincidences, which happen to be in perfect accord with our trial theory but totally incompatible with natural evolution? These impart a quantum shift in probability, but remain sufficiently inconclusive to *prove* the case, of course.

For God the spiritual world exceeds in importance the vastness or power of the material universe. This is difficult for us to appreciate, because the intangible values of the spiritual world involve little energy or effort, while the slightest physical forces can obliterate our existence. Our intense and constant contact with the material world relegates spiritual abstractions in our order of priorities.

The Primal Covenant

33:72 We offered Our trust to the Heavens, to the earth, and to the mountains, but they refused the burden and were afraid to receive it. Man undertook to bear it, but he has proved a sinner and a fool.

The absolute essence of the theory is presented here. God offered His trust to everything in the universe, including inanimate objects granted temporary

awareness for the purpose. All refused the responsibility, except man. (Can inanimate objects talk and make decisions? For us no, but for their Creator it should be no problem).

This acceptance explains the unique position of humans.

Humanity was then furnished with free will, consciousness, conscience, myriad temptations and pastimes; all essential for the undertaking, which is why we don't see them in other life forms.

At some time in the past, mankind, animals, and every object in the universe were summoned to acknowledge God as their Creator; all testified, having little option otherwise.

But given the choice to accept the responsibility of bearing this truth on trust, humans alone took the challenge, precipitating a fundamental change to their nature. The responsibility involves bearing the truth as an act of faith in total freedom, necessarily in a *state of indeterminacy*, where the certainty of the existence of God has been withdrawn.

Is this the basis of our deep consciousness? Is this the essence of our existence, the reason we have souls? Does this explain our strangely unique attributes? According to this theory, yes precisely.

7:172 Your Lord brought forth descendents from the loins of Adam's children, and made them testify against themselves. He said: "Am I not your Lord?" They replied: "We bear witness that You are." This He did, lest you should say on the Day of resurrection: "We had no knowledge of that," or "Our fathers were indeed idolaters; but will You destroy us, their descendents, on account of what the followers of falsehood did?"

This recounts the most amazing event in humanity, the basis of man's spiritual awareness. Every human that has ever lived, or yet to be born, was brought to life at some time in the past and testified to the existence of God.

All solemnly swore to bear witness to the verity of God in the future state of indeterminacy of this world. This is the Primal Covenant, to which every soul has subscribed.

Free will allows total freedom of choice on the matter.

The common feature connecting these three stages of existence is the soul. On accepting the trust, each individual was endowed with an eternal soul. In this life, the soul is re-united with a temporal body until death. In the next life, it is re-united with a reformed body again.

The soul pervades our existence, forms the basis of our consciousness, and is the fundamental quality that separates us from other life forms, manifest in the unique spiritual awareness of humans. This provides a viable coherent explanation for the meaning of life and the profound fundamental disparity between humans and every other life form.

02:28 How can you deny God? Did He not give you life when you were dead and will He not cause you to die and restore you to life?

This is another reference to the momentous event. After subscribing to the Primal Covenant, all were caused to die till this life, where the soul is joined with a sentient body. After death, the soul separates until joined once more with a new body at the Resurrection for the final reckoning.

03:83 Are they seeking a religion other than God's, when every soul in Heaven and earth has submitted willingly or by compulsion? To Him they shall all return.

On the Day of Resurrection all will be brought back to life, the third life, but this time for eternity, either in Heaven or Hell.

Some say the effort to create the Universe to see how each soul acquits itself is just too much, and besides God has better things to do. We don't have God's perspective; passing judgment on these infers we do. We're not in a position to judge the wisdom of it unless we are qualified to judge God. Ants are more qualified to judge us than we are to judge God.

What we should do instead is to evaluate the probabilities involved. Then if the theory is viable, we should contemplate its consequences. If God has granted us life for this reason, the laws and conditions that go with it deserve respect.

The theory is in perfect harmony with the spirituality component of our existence; difficult to explain otherwise. Its coherence is too substantial to be lightly dismissed. It cannot be disproved and circumstantial evidence strongly supports it. Important mysteries, such as the meaning of life and eternal destiny, are explained.

Observing it has no cost but everything to gain. Denying it has nothing to gain, and everything to lose.

God with infinite power has limited Himself to be just, thus the reason for the initial summoning of all humanity for the Primal Covenant; otherwise in the Final Reckoning we could say that we were unaware of it, or that we were not warned, or if we had been informed, we would have acted differently.

Summary

In the distant past when everything was in utter submission to God, man subscribed in a momentous covenant to bear the trust of God. The trust would be worthless without a state of indeterminacy. It accounts for the uniqueness of spirituality to humans, inexplicable otherwise. It is why we cannot completely dispose of spirituality even though it serves no particular purpose.

The souls of all Adam's progeny were summoned to witness the absolute truth, the existence of God, and to testify to this in a state of indeterminacy in this life, the second life, in which the certainty of the God's existence has been removed. Responsibility for the trust would be meaningless if the existence of God was certain.

Other life forms are not burdened by it thus are devoid of immortal souls and unlikely to be resurrected, judged, rewarded or punished.

Our spiritual awareness and deep consciousness derive from this covenant, to which everyone is irretrievably and irrevocably bound. It is the source, deep in the innermost recesses of our existence of a primal, subconscious, undeniable awareness of the supernatural.

It is manifest in every culture and age as mankind's extraordinarily unique obsession with religion, superstition, metaphysics, magic, and the supernatural; all notably absent in any other life form. It is also the source of awareness of ethics, the universal awareness of good and evil, and the reason for man's fundamental difference with animals, though we share 98% of DNA.

Many nonreligious people still acknowledge the existence of God despite the lack of any direct evidence for it. This reveals strange irrational behaviour, which can be explained by the Primal Covenant that has instilled in us an inseparable spiritual awareness.

It also explains the meaning of life; we are engaged as combatants in the battle between cosmic entities of good and evil. Though we have all previously born witness to the existence of God, we will be actively tempted to deviate from it by a suitable advocate, the Devil.

Lest we stay true to our covenant by default or apathy, we are charged with temptations, to which we are exquisitely receptive. These furnish the driving force to deviate from spiritual obligations.

Even believers will be severely tried; the reward and punishment are not trivial, nor is the trial. An unlimited diversity of temptations and pastimes powerfully distract us, catering to every whim and weakness, again notably absent in other life forms.

From God's view mass, energy, time and all their components are subservient figments of His creation. Every action in the universe, every atomic collision and every spin of every electron, from time zero till the end of time is inexorably predictable.

The war between good and evil involve eternal values and transcend this world. Their clash in the spiritual world rivals the collisions of stars in importance, but since it barely registers a whimper on our temporal senses, we don't appreciate the importance.

These wars occur in a parallel universe in other dimensions, yet are still detectable to our consciousness. No other life form shows any inkling; they all behave and act strictly in total subservience to the laws governing preservation, adaptation, and propagation of genes.

The extraordinary entity of free will, granted for the purpose, allows actions and thoughts to override the laws of physics and break the dependence on evolutionary conditioning.

Status of Humanity

02:30 When your Lord said to the Angels: "I am placing on the earth one that shall rule as My deputy," they replied: "Will You put there one that will do evil and shed blood, when we have for so long sung Your praises and sanctified Your name? He said: "I know what you do not know." He taught Adam the name of all things and then set them before the angels...

17:11 We have made all things manifestly plain to you.

Having accepted to bear the trust of God, a quantum difference with other primates developed; elevation to the status of God's deputy on earth. Though we share nearly all DNA with chimpanzees, our disparity is disproportional and inexplicably great but totally in keeping with the elevated position as cosmic spiritual combatants.

It would be inappropriate if species more intelligent than humans but devoid of spirituality, morality, conscience, or deep consciousness existed. (Neanderthals were prime candidates; physically stronger with bigger brains, but mysteriously and conveniently disappeared).

The vast difference between humans and animals doesn't prove man's special relationship, but is significantly thought provoking. Humans must appear physically close to primates; otherwise it would become disingenuously obvious where we came from. Yet we are so fundamentally different to them that it presents a significant though inconclusive sign.

If some apes worshipped God or showed spiritual awareness while some humans were totally devoid of spiritual awareness or deep consciousness, much of the evidence backing the theory would collapse, as would much of its coherence and cogency. This is precisely what would occur if we were accidental creations of Nature.

The second verse implies the imparting of technology to man, over and above even the angels. Scientists no doubt will offer plausible theories to explain how humans have developed their extraordinary capacity, but the profound difference produced from a relatively small increase of brain mass is thought provoking.

Consider the vast difference between human achievements and animals: we have skyscrapers, air-conditioning, agriculture, animal farming, a structured society, and dedicated armies. But wait; termite ants also have all these and have had them for millions of years before us, yet their brains are invisibly small, millions of times smaller than the human brain. Primate brains are millions of times bigger than ant brains and structurally almost identical to humans, yet lag ants in many areas. After millions of years of development, they are unable to emulate much of the achievements of ants (but only eat them).

A pattern becomes discernible: claims of the theory cannot be disproved, and appear viably backed by circumstantial evidence, in many cases with a considerably high probability but always just short of conclusive proof, in strict compliance with indeterminacy.

Dogma in Refuting the Next World

10:36 Most of them follow nothing but conjecture. But conjecture is no substitute for Truth.

45:25 They say "There is this life and no other. We live and die; nothing but time destroys us." Surely they have no knowledge of this. They are merely guessing.

This is a cornerstone of the theory. Coherence demands that life hereafter remains impossible to prove or disprove.

If another life awaits us, the implications are immense. If not, nothing really matters anyway; if Earth and all life on it were obliterated next week, what would it matter if we had existed or not or how smart we were? Who is going to contemplate or rue it?

Atheism has to prove God does not exist; but since it can't theism by default is a viable alternative. Theism is based on the premise that proof of the existence of God must not and cannot be attained; as is exactly so. Science can refute every other competing theory, such as the existence of elephant headed gods living in the jungles of India.

On what principles is atheism based? What evidence can it present to support its case? Can it derive a coherent case from first principles? If it can't, the premise is weak. Faults in the Bible does not constitute proof. Atheist theory is based more on emotion than evidence.

But it cannot be allowed to fail either, since it would prove theism by default. A delicate balance of indeterminacy must be maintained that can only be resolved with wisdom.

Logic and religion are *not* immiscible or mutually exclusive. Common sense and logic can be applied to any subject, but where evidence is insufficient or deliberately withheld, wisdom is essential. It enables application of fuzzy logic to ethereal values, the precious quality that enables recognition of one's limits, the ability to overcome prejudice, and induces an essential prerequisite: humility.

Spiritual awareness hovers in the delicate balance of the twilight threshold of our perception. It is strengthened by deliberately raising sensitivity to it, or can be smothered by intentional suppression. If one sincerely seeks it and finds nothing, it suggests nothing is out there. Looking for irrefutable proof is fundamentally flawed. If no trial was involved, trips to Heaven could be arranged with angels as tour guides. Confronted with a strong temptation, perhaps one could occasionally return for confirmation, just to make sure. One might wonder then what the whole point of the exercise is. Flaws shouldn't exist in God's design. Wisdom, sincerity, and humility are essential. No proof either way can be expected. The attitude should be: "It's vital for me to find out; I really want to know," instead of: "Where's the proof? Only if I see irrefutable evidence will I accept."

Religious belief in Europe has steadily decreased. It should be fading away to be replaced with secularism, but instead considerable superstition, paganism, mysticism, and magic (all notable for their total irrationality) have developed in its place. This is incompatible with increasing education and sophistication, but fits perfectly with our theory; spirituality imparted by the Primal Covenant.

Instead of a decline in belief in the supernatural, decline in traditional religion is being replaced by totally irrational beliefs, reflecting the intrinsic component of spirituality built in our constitution and why it's so difficult to dismiss and ignore it.

Loss of influence of the Church has led to a decrease in arrogance and increase in humility. The effect isn't lost on laity who see these benefits derive directly from loss of power, encouraging more of the same. The once mighty Church in its decline has become humble, while Evangelists and atheists in their ascent arrogant.

Humility and wisdom are essential in the evaluation of truth. It discourages prejudice and increases discernment,

45:22 God created the Heavens and the earth to reveal the truth and to reward each soul according to its deeds.

A succinct description for the meaning of life is presented here. The best explanation can only be expected from the Creator of life itself. Forces of nature and the size of the universe are not as great for God as for humans. All these are subservient figments of His creation. Of greater importance is the outcome from the spiritual struggle in the total freedom of the human mind.

Only in viewing the Universe from God's perspective, can one appreciate that the outcome to these wars is comparable in importance to the immense forces tearing the universe, all dumb entities, totally pre-programmed and totally predictable.

Conditioned by our constant experience at the receiving end of the forces of Nature and the material benefits derived from understanding and harnessing infinitesimal parts of them, our outlook on the forces of nature is diametrically different from that of God.

If we were totally unaffected by and independent of these forces and had infinite power over them, we too would view them differently and develop greater respect for those entities that act independent of us or over which we didn't have total direct control.

Science in Evaluating the Theory

The political power derived from harnessing nuclear energy has led governments to continue spending on basic research in the hope for more breakthroughs. A current favourite is the "Law of Everything", but the closer they get, the more elusive it becomes.

Since 1900, fundamental theories in physics and cosmology have been turned on their heads every decade and the trend continues.

Till recently, theories in physics could be understood in real world terms. Now they are abstract concepts derived from equations that few can visualise. Physics is drifting into a funk, where solutions tend towards the indefinite, open to multiple interpretations and maybe even beyond comprehension; this in great contrast with the complex and dazzling discoveries of the early 20th Century that were conceived in beautifully simple and elegant thought experiments.

Immense advance induced the expectation that scientists could soon provide answers on all matters and cure all ills. Though religion was undermined, alternatives failed to materialise.

Scientific and engineering progress between 1900 and 1950 was much greater than 1950 to 2000. Progress in physics between 1900 and 1930 was incomparably greater than any other period before, since, or surely can ever be again. Scientific and engineering progress from 1970 to 2000 was less than 1940 to 1970, or 1910 to 1940.

We have passed the peak rate of scientific progress, forever.

Scientists are unlikely to regain their status as the world's panacea able to solve all the world's problems. Now they require supervision lest they cause more problems than they solve. They were not then, still are not now, and probably never will be in a position to present an alternative to religion. To their credit they never claimed it.

To find absolute truth requires more than science and intelligence; it requires wisdom, the noblest mental state one can electively attain.

Some may say Eastern mysticism is nobler, but its objective is to reduce stress and induce relaxation. It doesn't involve absolutes, is human centric, doesn't generate an increase in knowledge or produce great insights.

Before long, computers will exceed the processing power and intelligence of human brains. After that, the difference between them will become enormous. It takes 20 years to train a human brain, but 20 minutes for a computer. By the end of the 21st century, a huge difference in productivity between scientists and computers in acquiring and processing knowledge will develop.

The load on the human brain is approaching its capacity (as fresh engineering or medical graduates will readily testify). It can't increase indefinitely, especially at the rate of the last few centuries. Education is adapting by specialisation.

Assuming the modern scientific age began in 1600, scientific knowledge during the four century period to 2000 has increased by a factor of 140,000 based on a rate of increase of say 3% per year. This is difficult to maintain for the next 400 years; requiring an increase in knowledge by another factor of 140,000. Can the human brain absorb such an increase? All knowledge in 1600 could theoretically

have fitted in a single brain. Galileo and Newton's great discoveries were taught at universities, but now are taught to fourteen year olds. Can the trend continue into primary school, or will students be obliged to stay in university till age 50? The only alternative is to divide present subjects into 140,000 subdivisions.

Progress at this rate for another 4000 years requires an increase in knowledge by a factor equal to the number of atoms in the solar system, 2x10exp.51. The peak in the rate of progress is behind us.

Consider aerospace. The first powered flight in 1903 was followed in a mere 66 years with the moon landing. In 1969 wide body jets became operational and are still the mainstay of air travel 40 years later. Around the same time, Concorde began commercial service, but after three decades was retired with no replacement in sight. The B52 bomber, developed 50 years after man's first flight, is still after 50 years in service the backbone of the USAF. The fastest aircraft is the SR-71, developed in the 1950s.

If progress had continued at the same rate of the first 66 years, travel to the planets would be routine, while cold fusion would be powering homes and cars. (The great progress in electronics is in engineering, not basic science.)

Can the amount of knowledge absorbed by the human brain increase by a factor of even one hundred? Can future science and engineering graduates absorb a hundred times more knowledge than those today? Can we divide physics into 1000 or even a 100 different subjects at university level? If not, then progress in scientific knowledge will essentially grind to a halt in a mere century or two. NB: Basic science is very different to engineering, which can continue to develop indefinitely.

Humans may have to wait until evolution catches up with bigger or more efficient brains but this is unlikely at a 3% growth rate. More likely, humans will delegate the bulk of scientific processing to computers. With decline in popularity for science and the increasing power of computers, there's little doubt which is more likely.

Computers work full time and need no training, food, sleep, housing, schools, universities, holidays, pensions, or motivation. Man's role in science would become supplier of empirical data to computers for evaluation; man the technician catering to computer researchers.

The rate of increase of processing power and memory capacity of computers seems likely to continue at its geometric rate for the foreseeable future, especially if quantum, biological, or molecular processors are developed. With some of these, the capacity of all the worlds' computers today could fit in the volume of a sugar cube.

Computers are unlikely to attain human wisdom or philosophise on the meaning of life; but if they did and were not cramped by emotion and culture, they would definitely adopt the logically optimal expedient position of theism, even though there is no computer hell.

Only wisdom can change one's attitude from the materialistic: "I must look out for Number One, enjoy life to the fullest, acquire maximum material assets, especially as there is only this life," to the spiritual: "Life is full of trials and adversities that must be endured. This life is fleeting compared to the real life in the world to come."

Politics of Faith

07:14 But when Our undoubted signs were shown to them, they said: "This is plain witchcraft." Their souls knew them to be true, yet they denied them in their wickedness and their pride.

The verse refers to the effect of the plagues on Pharaoh and his people. Egypt's dazzling civilization was rivalled only by Babylon. Its mathematics, science, and industry were the main inspiration for the Greeks and influenced the course of human history. Though they witnessed the greatest miracles ever seen, they refuted them through pride; the deadliest of the deadly sins (which implies humility is the best virtue). During each affliction, they implored Moses to lift the plague promising to acquiesce but they reneged every time.

Despite their intelligence, they reacted irrationally by ignoring the miracles, even though their souls knew them to be true. Arrogance prevented them submitting to a stuttering outcast and his tribe of slaves. The superiority that the Egyptians felt over their Israelite slaves is comparable with how the Europeans felt towards their colonies, the Soviets towards the Afghans, Americans towards Iraqis, but the religion of the Israelites survives today, not the worship of jackal headed Anubis, falcon headed Ra, the mummy god of the underworld Osiris, his wife the cow-horned Isis, and their hawk headed child Horus.

The sophisticated Romans felt exactly the same towards the inferior Jews, yet after a few centuries, the Roman Empire was worshipping one of their insignificant second-class subjects (not even a Roman citizen) while Jupiter, Mars, Apollo, Venus, and Diana have become quaint figures of a daft mythology.

During the first century, Romans considered Jews terrorists, which culminated in the destruction of Judea. Then for several centuries, they considered Christians terrorists. They couldn't understand why this minority were so unpatriotic, adopting un-Roman values, or why they just wouldn't become Romanised.

The West regards Muslims the same: why don't they integrate and become westernised? The Romans regarded the Jews, then the Christians, exactly the same the West regards Islamists today, strange, alien, nonconformist, subversive, and terrorists. If the early Christians hadn't been so inflexible and intransigent like Muslims today, the West would still be worshipping Zeus, Apollo, and Odin; human sacrifices was stopped by the Christians despite popular opposition.

An important historical point little considered is the contention in strategy between the Pharisees and Jesus on the Roman occupation. The Pharisees regarded liberation from Rome of paramount importance, whereas Jesus considered it irrelevant.

After the death of Herod, Augustus replaced the semi-autonomous government of Judea with direct rule from Rome (the last king of the Jews was an Arab). In an independent Judea the Pharisees would become the dominant political force unlike their limited role under Rome. They regarded the role of the Messiah as temporal; to deliver them from Roman occupation, but Jesus saw the role of Messiah totally differently, solely for spiritual salvation.

He said nothing about Roman occupation and attacked the Pharisee clique for subordinating spirituality to politics, corrupting the spirit of the Scriptures, and obsessing on the letter of it, (which increased the power of their position as its sole arbiter).

In one of their carefully crafted conspiracies to hamstring Jesus, the Pharisees devised a clever trap. Confronting him in public, they demanded he openly state where the peoples' loyalty should be, with Rome or God. If he had said Rome, it would have been religious heresy, giving Caesar precedence over God. If he had said God, it would be political subversion, an affront to Roman rule. He took the coin with Caesar's face and said: "Give unto Caesar that which is Caesar's, and unto God that which is God's," thus neutering the attack and throwing the hazardous political interpretation back to the stymied Pharisees. Now they had to decide what is Caesar's and what is God's, damned whichever they say. The devious scheme they had planned intensely over days was neutralised off the cuff.

Jesus' violent attack on the clergy demonstrated deep animosity. The Pharisees considered the poor, ill, and the physically handicapped unclean, thus forbidden to enter the Temple. Jesus put this attitude on its head with the Beatitudes. He condemned evaluation on physical traits and in their place exalted spiritual virtues, praising the poor, the weak, and the humble to the astonishment and anger of the Pharisees. He said the beggar, whose sores were licked by dogs, would soon be in the bosom of Abraham. He praised the Samaritan for helping the mugged stranger, to denounce the prevailing view that Samaritans were unclean as a tribe. Jesus' compassion towards sinners was an affront to the Pharisees. He elevated the humble repentant sinner above the proud Pharisee who considered himself righteous for fasting two days a week and diligently observing the letter of the law.

Some historians attribute these as a strategy by Jesus to gain power among the outcast, poor, and lame; they are totally unable to understand his motives otherwise. All possibilities are considered except the most obvious, which Jesus himself professed: on a mission from God. If his motivation was temporal, he wouldn't have been so reckless in attacking the Pharisees. He was certainly smart, cleverly outwitting their carefully planned conspiracies spontaneously, every time.

He could have bided his time or made some sort of accommodation with them. Intransigence was politically unwise. It had little benefit and made powerful enemies, but was fully compatible with an uncompromising creed based on absolute values.

Criteria for Hell

Many people believe in God but are irreligious, which is not very rational. They should try to find what meaning there is to life, what we're doing, and where we are going. The consequences are too great. If there is life hereafter, everyone is destined for eternity in Heaven or Hell; no grey area in between. Our fate is balanced on a knife-edge.

If there were a third option, a state of limbo of no pleasure or pain for those who have done little good or evil, one could aim for that. If there was no Hell, many might prefer the pleasures today cash, to the distant future benefit of Heaven, promised. A Faustian deal with the Devil would become viable, even attractive, but in the Divine scheme of things, the option doesn't apply. Escape clauses and loopholes are unavailable. Indifference is dangerous and the Covenant explicit; either adopt faith as obliged by our collective Covenant or spend eternity regretting it.

Conventional wisdom says if one avoids crimes against fellow man, (murder, theft, violence, oppression, discrimination, racism etc) one is basically OK and exempt. Unfortunately this is pure conjecture.

The punishment seems grossly disproportional. The disparity between it and the crime induces scepticism. How is it fair for mass murderers to suffer the same fate as sweet old ladies who never hurt anyone merely because they had no faith?

Distinction should be made between civility and morality; one is the expedient relationship with society, the other with God. One is for convenient co-existence; the other deference to our Creator. The former derives from animal subservience to the alpha-male.

Adapting to the hierarchy may be unpleasant, but has advantages: greater security for the individual and progeny, better diet, cross learning, increased success in hunting and longevity.

Avoiding sins for the sake of civil laws isn't a spiritual virtue; its reward is the smoother functioning of society. One shouldn't expect Heavenly reward for it. Increasing population density increases the necessity to conform; jungle law is more stressful with less security.

Respect for others leads to respect in return, which makes life more pleasant, but these are social virtues developed for civil co-existence; unrelated to man's covenant with God. Another incentive to conform is that most civil sins are crimes; avoiding them for fear of punishment and imprisonment is not spiritually virtuous.

The proud have more to gain by showing respect to others because they enjoy the reciprocated respect more than others. Avoiding sins for personal benefit is merely expedience based on the desire for respect, civility, or fear of retribution.

The little old lady, who never hurt anyone, behaves sweetly because it is in her best interest to do so. Being among the weakest, most dependent members of society, she procures the most benefit by gaining its respect and affection. If born male, it would act differently, but it is the same soul.

Spiritual virtues are independent of physical features. In the final reckoning, no penalty is based on gender, physique, or other physical traits, over which the individual has no control.

If the little old lady acts sweetly to optimise benefit from society, she is acting the same as the thug who deploys a threatening demeanour, because that is how he gets the most respect and deference from society or peers, especially if the thug sees that conforming civilly brings less benefit.

If the same thug was born in another age in another culture, it might have been induced with exactly the same objectives to join the clergy or army, where he might have become a model priest or soldier, because that is how he would maximise benefit from society.

Practical adaptations to society, social acceptance, and popularity have their own social rewards, but not eternal reward in Heaven, which requires selfless spiritual virtue.

If the same man were given a lucrative job requiring a courteous demeanour, he would change his attitude. Social adaptation and economic optimisation are not suitable criteria for deciding who goes to Heaven; only faith and submission to God are.

If Genghis Khan and Stalin had developed into beautiful women, they would have behaved differently, because that is how they would have optimised their benefit from society. They would eventually have ended up perhaps as sweet old ladies or devoted grandmothers, but the soul would still be the same.

Animals are generally ill treated by humans. Any action to improve their welfare, reduce cruelty, and preserve their habitat is very noble, because they can't express their plight against our tyranny over them, nor their gratitude for those who help them. Though admirable and with the best of intentions, it doesn't have a Heavenly reward; neither does keeping one's house tidy, wearing clean clothes, or behaving with decorum in public. These pillars of civilised behaviour don't involve eternal values and won't count for much in the final reckoning. These are social merits, not spiritual virtues that can transcend the cosmos from this world into the next.

Eternal values are based on selfless spiritual values: submission to God, prayer, charity, forgiveness, fasting, enduring misfortunes with fortitude, and observance of religious laws.

Many are tremendously mistaken in thinking Heaven or Hell is very distant; they are much closer than we think. For millions, they are days or even hours away. For the dead, eons pass in an instant, thus Heaven and Hell are as close as death. In the first instant of awareness after death, we will all be confronted with the most appalling irreversible prospect imaginable. Nothing can compare with the horror of confronting an irrevocable eternal doom.

How futile worldly pleasures will seem, how brief its duration, and how little the cost of faith.

Spiritual Awareness

76:02 ...be he thankful or oblivious of our favours, We have shown him the right path.

Whether we want it or not, we have all been shown the right path, knowledge of right and wrong, the difference between good and bad, and the ability to discern between them.

Our extraordinary sense of deep consciousness, unique awareness of spirituality, and obsession with the supernatural are rooted in the Primal Covenant. Practically no other coherent explanation exists.

It is why these are suffused in every human culture from prehistory. Of tens of millions of species, including those with brain sizes greater than humans, no other has shown the slightest inkling.

The perfect compatibility of these otherwise inexplicable phenomena with this theory is very significant. Humans alone have undertaken such a contract, we alone are engaged in the trial, and we alone have these extraordinary attributes.

No one can recall their oath of Primal Covenant to which everyone has individually subscribed. If we could, the value of faith would vanish. It also explains why the spiritual component from our existence is so difficult to eliminate.

Since we can't recall the Primal Covenant, we should all be totally impervious to it. Mankind, the most successful thinker of any life form, is not collectively paranoid. There must be something to it. Continued obsession with it is irrational; in every other field, humans are extremely rational. Why is it so irrational in just this field?

The aftermath of that momentous event can be felt in the twilight of discernment; a diffuse, subtle awareness that we are not alone, that unlike all other life forms we cannot be truly and deeply satisfied through material acquisition alone.

This vague awareness has just the right degree of indeterminacy; any more would make it too obvious, less would induce excessive doubt. It should be barely perceptible for those who seek it, while easy to ignore for those who don't.

Consider the phenomenon of ghosts. Numerous reports from varying sources

suggest there may be something to them. Scientists have recently studied the phenomenon and shown that castles and catacombs, the most often quoted locations, have elevated levels of low-frequency sound. These develop from long corridors leading into large arched chambers, amplified by the high sound reflectivity of bare walls, causing resonation at infra-sound wavelengths. The effect is rarely encountered in normal buildings, which have smaller proportions and usually padded with furniture, carpets, and curtains.

Though low frequency sound waves are below the threshold of human hearing (below 20 Hz) somehow people sense it, inducing an eerie sensation, mistakenly attributed to ghosts. In the dark, hearing is accentuated and a "haunted" location psychologically heightens the effect and sensation. A similar effect may be the persistent human awareness of the supernatural,.

A Breach of Evolution

When humans have shelter, security, and food, they should become content, yet never seem to. We always strive for more, unlike animals who quickly become satisfied. The quantum disparity with other life forms is incompatible with our genetic similarity. If this derives from greater human intelligence, we should see a relationship between intelligence and hedonism in humans, more intelligence leading to more hedonism, (if anything it's the reverse).

The most coherent explanation is the trial nature of humanity. From an evolutionary perspective, the wealthier one gets, the less the attraction of further riches should become, but the rich strive for wealth more than others, even though they have the least need for it and are incapable of ever spending it. In this theory, wealth is a means for testing, which agrees with observation. In evolution, it is a resource for shelter and nourishment.

Other human behaviour runs counter to the preservation of genes; increase in affluence is accompanied by *decrease* in progeny. (According to UN estimates forty percent of births are unplanned; this decreases even more the evolutionary propensity for progeny). The rich often prefer to adopt children of other "races." Many even adopt from other species.

Some will say altruism also exists in animals; when a colony is attacked, ants sacrifice themselves rather than run away, but they do so to preserve genes they share with siblings. Also, individual ants don't survive outside the colony.

Among millions of species, humans least direct their actions to gene preservation, instead they spend enormous resources on altruism, leisure, vanity, vaunting and flaunting (otherwise all cars and houses would be utilitarian, compact, and cheap).

9:115 Nor will God lead men astray after He has given them guidance until He has made plain to them all that they should avoid. God has knowledge of all things.

02:27 But He misleads none except the evildoers, who break His covenant after

accepting it and divide what He has bidden to be united and commit evil in the land. Truly these shall lose much.

13:28 Say: "God leaves in error whom He will, and guides those who repent and have faith; whose hearts find comfort in the remembrance of God..."

The uniqueness of morality to humans fits perfectly with our theory, but other plausible explanations must necessarily exist, such as to facilitate communal life. Most species also live in communities, some with greater population densities than humans; thus evolutionary pressure for development of ethics is greater for them.

Ethics doesn't require much intelligence, so it should have developed in animals. If it has no benefit, why did it form in humans? As ethical awareness develops in youth, the general tendency in all cultures is a commitment to be good. Totally random distribution would result in half opting for good, half for bad.

Evolutionary success is better served by a propensity not to be good, as is the successful attitude of alpha males.

Cut Off Point

The verse presents an anomaly: is it fair that God should lead a man astray and then condemn him to Hell? If a man is led astray by God, who can lead him back? Does this contradict the justness of God?

To explain this, firstly consider another potential flaw: in the Final Reckoning there will inevitably be a cut off point, below it damnation, above it salvation. A saved soul may differ with a condemned one by a tiny amount. At the cut off point, the difference between salvation and damnation may be a single cent of alms. It's either Heaven or Hell, nothing in between.

Is it fair to send a soul to Hell for eternity because it had paid a single cent less than a luckier soul, whose deeds are exactly the same but differ by a single cent? Can the difference between infinite reward of Heaven and infinite torment of Hell be a single cent? To prevent such a scenario, when an individual chooses disbelief, its desires are catered to. This provides more opportunities for sins, and strengthens the case against it. Religious obligations are soon forgotten and worldly pleasures provide a smooth slide downwards. The rich consider their wealth the product of acumen or luck, but is really deliberately allocated to waylay them.

God doesn't actively lead unbelievers astray; but by catering to their wishes, allows them to do so themselves, thus averting the one cent scenario. He assists weak believers by preventing them becoming rich. Meanwhile the sins of believers will be absolved by repentance, piety, prayer, virtue, and charity, further eliminating the single cent difference scenario. Afflictions and disasters cause reflection, a call to piety. Most revert to old ways, but for those that don't, the affliction becomes the means of salvation, a blessing in disguise. In perfect

accord with the theory, hedonists are never really satisfied anyway, though this is not obvious to others. However much is acquired, more is wanted; satisfaction is rare in a static state.

A Matter of Perspective

27:02 As for those who deny the world to come, We make their foul deeds seem fair to them, so that they blunder about in their folly. They shall be sternly punished and in the hereafter have much to lose.

18:102 Say: "Shall we tell you who will lose most from his labours? Those whose endeavours in this world are misguided and who yet think what they do is right; who disbelieve the revelations of their Lord and deny that they will ever meet Him."

Though we may be certain we are right, we could be fatally mistaken. The error begins with rejection of life after death. This decision affects perception on everything else. We quickly forget no evidence for it exists.

Western culture and law is firmly based on those of Rome, but the Romans never doubted the morality of their spectacular games, now regarded as abject barbarity. The West still doesn't appreciate its complicity or guilt in the bestial injustice inflicted by Israelis on Palestinians, yet still considers itself a just arbiter of morality.

The West has recently legalised and now encourages all the deadly sins: lechery, pornography, adultery, drunkenness, greed, fornication, debauchery, homosexuality, abortion, gambling, etc. Either they or their grandfathers are very mistaken.

The West is rapidly losing its ability to appreciate the difference between what is legal and what is wrong. The perception is if it's legal, it's perfectly OK. Spiritual virtue has been smothered by social expedience. Laws are passed only for smooth functioning of society.

By extrapolation, many crimes today will before long become legal and sanitised. Legality is fully equated with social acceptability. Democracies are unable to stop the downward moral slide. Homosexuality was considered a great moral sin for 16 centuries; for 30 years it is regarded as acceptable. How can one be certain who is right in absolute terms?

Paedophilia today is regarded with the same abhorrence as each of the above sins was in previous generations. The trend shows this too before long will be reclassified and normalised. The age of consent is constantly being lowered. It used to be 18, now 16, there's talk of 15, and soon 13. When it becomes pervasive, legalisation will become inevitable and economic exploitation will inexorably follow.

In democracies the trend is inevitable; human nature tends towards permissiveness, and society follows. Judgment on what is right or wrong is

impractical unless absolute values can be determined, but absolute values can only be ordained by God. No one else has the authority to ordain absolutes. If absolute values exist, sins cannot be legitimised by consensus.

Democracy has a natural tendency to move away from absolute values. The latter implies the existence and authority of God, which is unpalatable in a secular society.

Any attempt to determine absolute values requires referral to the Church, anathema for democracies, who have only recently managed to wrestle abusive political power away from them.

A Partner in Wealth

17:63 Rouse with your voice whomever you are able. Muster against them all your forces. Be their partner in their riches and in their offspring. Promise them what you will. (Satan promises them only to deceive them.) But over My true servants you shall have no power. Your Lord will be their all-sufficient Guardian. (This is addressed to the Devil)

Riches should automatically bring happiness, but don't; comfort perhaps, but not necessarily happiness. Wealth comes with an unseen furtive partner, otherwise happiness from wealth would be easy to attain. Money isn't the root of all evil, but opens highways to it. With a loose rein on one's desires, plenty of money, and the Devil as partner, it is difficult to stay virtuous.

Wealth overwhelms the appeal of the distant prospect of reward in another world in another life. Self-restraint, voluntary hunger and thirst in fasting help to dispel these effects and readjust values.

Temptations exploit man's unique hedonistic nature. We are driven to every form of pleasure, especially the forbidden or restricted. All other life forms are content to feed and procreate in peace; they don't invent pastimes, entertainments, stare at the sky, philosophise on the meaning of life, or pray.

Time Component of Man

21:37 Impatience is the very stuff man is made of.

Unique among all creatures, humans are rarely content with their lot even when they have more resources than they can spend in a lifetime. Nature doesn't give other species regular income or health care. All struggle daily to feed, while constantly trying not to become food.

Animal food stock rarely exceed a few days, whereas humans can guarantee decades of food supply. Even animals at the top of the food chain struggle, but don't appear over-stressed, depressed, or terrorized by the prospect, but rather have an innate acceptance of the natural order (often they are more stressed in the safety of cages).

Predators don't kill for its own sake or greed, but humans enjoy killing for fun, sport, recreation, and vanity. When animals feed and procreate, they generally attain a state of contentment humans rarely reach.

Human contentment comes not from satiety, but from dynamic ascendance up the extended curve of material acquisition. The function isn't linear; the greater the progress, the greater subsequent gains needed to produce the same effect. We soon tire in a static state.

Unlike other life forms, we appear to have a time-based impatience factor built into our constitution, as stated in the verse. If contentment was easy to attain, temptations would lose their allure and become easy to ignore.

Constant acquisition of goods for everyone is impractical, thus man is destined to a state of continuous struggle for an unattainable goal, a state perfectly suited for the trial.

The theory would be flawed if mankind were able to quickly, with little effort, achieve a state of enduring satisfaction. If man could find happiness just through feeding and procreation, the driving force keeping it in the fray would dissipate. It could then easily detach itself from the trial. Impatience provides a dynamic charge that relentlessly draws the individual back to the battle.

The component of impatience in our constitution prevents us leaving the fray. The quest for more prevents escape from the trial. An attempt to escape it is the principle behind Buddhism, ascetic and monastic life.

Misfortunes

17:83 When We bestow favours on man, he turns his back and holds aloof. But when evil befalls him he grows despondent.

Misfortunes are instruments of the trial. Christians become very confused by misfortunes and disasters. Why do children die? Why is there so much suffering? How are these compatible with God's love for all? Even their clergy are at a loss, resorting to: "God moves in mysterious ways." The Archbishop of Canterbury has openly said he can't explain it (in an open letter about the Indonesian tsunami).

To escape the conflict, Buddhists suppress pleasure so they can avoid the disappointment of its loss and the pain of life's inevitable misfortunes. The higher one flies, the harder the fall.

Their objective is to flatten life's swings; to skip along the surface, rather than soar or sink. They strive to achieve a position of sustainable unwavering contentment in a static state of no-gain and no-loss. The aim is to suppress the constant wrenching of temptation by reducing worldly desires.

Contentment is tolerated only in bare essentials, emulating the ease and simplicity of animal life (Buddhist philosophy has notable similarities to Taoism).

It opposes our unique hedonistic nature, ordained for the trial, which always emerges indefatigable. Communist abolition of ownership failed. Buddhist abstinence is relegated mainly to monasteries; elsewhere it gets only lip service.

In Japan Buddhism appears mainly at funerals. Buddhist countries have become the most materialistic and zealous to acquire wealth; tiger economies are mostly Buddhist.

The Islamic perspective is that pleasure should not be denied, but restricted to defined limits and recognised as instruments of the trial. The allure is not evil; succumbing often is.

Self-restraint, the war against the self, is essential and should be solely for God's sake, not civil or cultural. Some feel the forfeited pleasure is excessive, but as the price for Heaven, it's not really.

To avoid the *expedient* acceptance of Pascal's Wager, temptations have to be powerful and relentless, which explains their great disparity between humans and animals.

Voluntary hunger and thirst, charity, material loss from abstaining from corruption, cheating, or stealing, pleasures forfeited in avoiding adultery, fornication, and intoxicants, are the price for redemption.

God's objective is not discomfort. When one feels burdened with more than one can bear, the problem is perspective. How great are these afflictions compared to those in the next world? No soul is exempt from affliction. Even prophets suffered greatly.

Just as the brain produces powerful opiates during trauma to reduce pain, it also naturally dampens the intensity of pleasure. Pain and joy seen in others are usually less than they appear.

An ascetic will not notice a verbal offence that would deeply injure an egotist. The pleasure derived by the ascetic from the beauty of nature requires vast expense to duplicate by a sybarite. The ascetic minimises expectation making it much easier to attain a plateau of contentment, but the drive must be for the sake of God to be virtuous.

57:22 Every misfortune that befalls the earth, or your persons, is ordained before We bring it into being. That is easy for God: so that you may not grieve for the good things you miss or be overjoyed at what you gain.

Regret is a relentless stalker.

If this is the only life, how can it not be? If only this or that had happened, what a great difference it could have made; how much happier we would be. But has anyone had a perfectly blissful ideal life? How fanciful to expect to be the first.

For the trial nature of life, diverse adversities will necessarily afflict everyone without fail, including the pious. All will be sorely tested.

The verse recommends a less wavering temperament where elation and grief are dampened; avoiding mood swings is mentally healthier. Excessive elation or grief is unjustifiable because their causes are means of the trial; overreaction is unwarranted. One must be resigned to the unavoidability of misfortunes. Not doing so induces unrealistic expectations, leading to heavier disappointments, stress, and crash in morale. If prolonged, it can lead to depression; an essential feature of which is the total loss of hope in the future, which by implication denies life hereafter.

If this is the only life, such reactions are understandable, but if there is eternal life hereafter, the attitude is inappropriate, damaging, and self defeating. The great reward of Heaven, the fleeting nature of life, and the inevitability of misfortunes are limitless sources of hope.

Many people see large areas of their past as wasted opportunities, failures in love, marriage, income, and material gain. Unbelievers view these losses as absolute; reconcilement with absolute loss is difficult. Their regret, grief, and stress are inevitably more intense.

It is not the misfortune itself, but how we react to it that is real, lasting, and consequential. All misfortunes soon pass into oblivion, but our reactions to them are eternal values that transcend this world to the next.

Actions of animals, devoid of free will, do not have eternal values. They are genetically programmed and environmentally conditioned.

Human actions are *not* preordained. Identical twins brought up together differ substantially in character despite identical genes and environment.

Secularism disapproves of reconcilement to adversity as submission to fate; such acquiescence to misfortunes is seen as weak and simplistic.

To avoid life's inevitable stresses, Buddhists renounce worldly pleasures by throwing out the baby (life's pleasures) with the bath water (the disappointments that inevitably come with them). The reasoning is that the baby is the cause of distress.

Life is an unavoidable mixture of good and bad, ups and downs. Buddhism fails to supply the motivation to renounce the pleasures of materialism. Many fail to feel the trade off is justifiable. For most, the promised reward of less stress from the denunciation of material goods in a state of tepid satisfaction can't compete with the tangible pleasures, excitement, and invaluable security derived from their acquisition, the pleasure in purchasing them, and the delight in the gratification of pride and vanity they bring.

2:155 We shall test your steadfastness with fear and famine, with loss of life and property and crops. Give good news to those who endure with fortitude; who in adversity say: "We belong to God and to Him we shall return."

3:185 You shall be bereaved of your possessions and dear ones, and subjected to the

insults of the pagans and of those to whom the Scriptures were given before you. But if you endure with fortitude and guard yourselves against evil, you shall surely triumph.

2:124 Did you suppose that you would go to Paradise untouched by the suffering which was endured by those before you? Affliction and adversity befell them; and so battered were they that each apostle, and those who shared his faith, cried out: "When will the help of God come?" His help is ever near.

29:01 Do men think that once they say: "We are believers", they will be left alone and not tried with affliction?

The conflict between good and evil is much more substantial than generally appreciated; the world is its setting. Battles fought in the human mind rival in importance the physical forces tearing the universe. A tiny part of its turmoil can turn Earth back to stellar dust. If the Creator of the universe imparts more value to piety than these forces of nature, who are we to refute it?

Since the reward and punishment are infinite, one should not expect the trial to be easy. All will be severely tried with afflictions and adversities. Believers should prepare themselves for more hardships than others. Unbelievers, once set irretrievably in their ways, will get comforts and riches to keep them occupied, amused, and oblivious.

Some may adopt a mercenary acceptance of Pascal's Wager as a calculated precaution. To reduce the purely mathematical expedience of such a decision, which detracts from the nature of piety, all will be tested with hardships to the limits of endurance. Salvation is earned from piety and self restraint rather than computation of probabilities in Pascal's Wager. The stakes are high, the rewards are great; so are the trials and temptations.

It is impossible to appreciate the universe as a backdrop to the trial so long as we view it with a human perspective.

The trial could have been conducted like a panel quiz:

"Do you accept the verity of the Primal Covenant which you have promised to upkeep in this world?"

"Yes I do."

"Right. Off to Heaven with you. Next."

If designed by humans, that is probably how it could be, but ordained by God with the Universe as backdrop, one would expect much more sophistication; an insatiable attraction to myriad diversion.

The Primal Covenant persists on the edge of our awareness, explaining our obsession with spirituality. We are extraordinarily receptive to unlimited varieties of temptations and pastimes, to which we quickly become accustomed, and must expand to maintain the same level of pleasure; all perfectly suited for the trial.

The material universe is subordinate to the spiritual one however unlikely it seems from our physical conditioned perspective. Those who are sure this is wrong should reflect on one of the latest deduction from quantum physics (which never ceases to bewilder) that the rock hard four dimensioned Universe we are sure we know so well is nothing more than a hologram of a two dimensioned plane:

Hedonistic Imperative

47:36 The life of this world but is a sport and a pastime.

102:1 Your hearts are taken up with worldly gain from the cradle to the grave.

03:14 Men are tempted by the lure of women and offspring, of hoarded treasures of gold and silver, of splendid horses, cattle, and plantations. These are the comforts of this life, but far better is the return to God.

18:07 We have decked the earth with all manner of ornaments to test mankind and see who would acquit himself best.

57:20 Know that the life of this world is a sport and a pastime, a show and an empty vaunt among you, a quest for greater riches and more children. It is like the plants that flourish after rain: the husbandman rejoices to see them grow; but then they wither and turn yellow, soon becoming worthless stubble. In the life to come a woeful punishment awaits you - or the forgiveness of God and His pleasure. The life of this world is but a vain provision.

13:26 God gives abundantly to whom He will and sparingly to whom He pleases. The unbelievers rejoice in this life; but brief indeed is the comfort of this life compared to the life to come.

14:03 Woe to those who love this life more than the world to come.

Temptations challenge every moral constraint in perfect accord with the trial. Our unique unlimited capacity for pastimes diverts us from our Primal Covenant, the meaning of life and final destiny.

Some animals have more free time than humans; lions rest 18 to 20 hours a day. Grazing animals also have plenty of time for reflection yet they never seem to philosophise, wonder about the existence of God, or ponder on the meaning of life.

They rarely seem to get bored either. When animals feed and procreate in security, they appear content, whereas humans get bored. Is there an evolutionary advantage in boredom or spending so much time and material resources on entertainment and recreation? Human obsession with these and animal indifference to them are inexplicable by evolution, but fits perfectly with the trial nature.

http://www.newscientist.com/article/mg20126911.300-our-world-may-be-a-giant-hologram.html http://en.wikipedia.org/wiki/Holographic_principle.

Numerous perfect fits increase coherence and cogency. Man is not just a sophisticated hunter-gatherer with a big head (in both senses) but a unique species based on its Covenant with God. Lest he crawl under a rock and stay there, he is conferred with innate impatience leading to boredom in static conditions and an insatiable desire for material acquisition, which drives him relentlessly back to the fray.

We can sense this deep in our souls, by tuning to the unique and extraordinary sense of awareness, a still small voice, which many deliberately suppress or allow to be smothered in the din of worldly commotion. Prophets and ascetics retreated to barren wilderness with minimal food to dampen the materialistic clamour, to hear more clearly the inner voice of the soul that recedes in times of comfort and disappears in luxury, but whispers perceptibly in times of suffering and physical hardship.

The widespread prevalence of religious beliefs in every culture throughout history, despite vast cultural and geographic disparity and millennia of independent development, suggests a common source, again in perfect compatibility with our theory.

In its obsession with the supernatural, humanity displays truly irrational behaviour, especially since there is no direct evidence for it. The supernatural is refuted by laws of physics, yet enduring and illogical belief in them persists everywhere. Why doesn't it just fade away? Why doesn't it apply to animals? Considering their similarity to us, why can't they appreciate these concepts?

If we are accidents of nature, before long genetic science will identify the genes that cause consciousness. These can then be switched off or transferred to other species causing them to develop deep consciousness.

The genes responsible for making the walnut-like folds in the human brain have already been identified; theoretically this feature can now be switched off, or transferred to other species that don't have it. If we are conscious souls bestowed with flesh and blood, we should never be able to induce comparable consciousness or spirituality in animals.

42:20 Whoever seeks the harvest of the world to come, to him We will give in great abundance; and whoever seeks the harvest of this world, a share of it shall be his: but in the hereafter he shall have no share at all.

11:15 Those that desire the life of this world with all its frippery shall be rewarded for their deeds in their own lifetime: nothing shall be denied them. These are the men who in the life to come shall be rewarded with Hell-fire. Fruitless are their deeds, and vain are all their works.

17:18 He that desires this fleeting life shall before long receive in it whatever We will; We bestow our gifts on whom We please. But We have prepared Hell for him; he will burn in it despised and helpless. As for him who desires the world to come and strives for it with all his soul, being a true believer, his endeavours shall be rewarded by God.

43:34 But for the fear that all mankind might have become one race of unbelievers, We would have given those who deny the Lord of Mercy dwellings with silver roofs, and gates and stairs of silver; silver couches to recline upon and ornaments of gold: for all of these are but the fleeting comforts of this life. It is the life to come that God reserves for those who fear him.

42:27 Had God bestowed abundance upon His servants, they would have filled the earth with evil. He gives them what He will in due measure; He knows and observes His servants.

20:131 Do not regard with envy the worldly benefits we have bestowed on some of them, for with these We seek only to try them. Your Lord's reward is better and more long lasting.

Unbelievers see this life at face value, a material struggle from the cradle to the grave; believers see it as a precursor to the next. Infinite reward doesn't come easy. The Christian view that God loves us all anyway and we're all going to Heaven is naive and baseless. There is no such assertion in the Bible. If God loves us all anyway, what is the point of life on Earth? Why aren't we sent to Heaven directly? It contradicts the assertion that we are suffering for the sins of our fathers, which is also incompatible with Divine justice.

The trial would be flawed if worldly pleasures were less attractive than religious chores; or if the existence of God were obvious or Hell evident. Temptations, by necessity, have to be more attractive than religious chores. Like power, wealth corrupts; if bestowed abundantly on believers, many would be seduced by it.

Unbelievers are given their wishes once set in their disbelief. When afflicted with calamity, many revert to faith as they reflect on their vulnerability and mortality. People are lulled to complacency by peace and prosperity, and jolted by disasters. We should speculate on our fate without the need for catastrophes.

07:32 "Who has forbidden you to wear the decent clothes or to eat the good things God has bestowed upon His servants? These are for the enjoyment of the faithful in the life of this world, though shared by others; but they shall be theirs alone on the Day of Resurrection."

Good things are for enjoyment. Joy and pleasure are not sins; there is nothing inherently wrong with them. They are instruments for the test by setting limits and conditions on them. The enjoyment obtained by exceeding these limits is the price paid for forfeiting an eternity of it. Abstinence is enjoined by the Creator of pleasure itself.

02:46 Fortify yourselves with patience and prayer. This may indeed be an exacting discipline, but not to the devout, who know that they will meet their Lord and that to Him they will return.

3:134 ... who curb their anger and forgive their fellow-men (God loves the charitable)...

31:27 "My son, be steadfast in prayer, enjoin justice, and forbid evil. Endure with fortitude whatever befalls you. That is a duty incumbent on all." (Addressed by Luqman to his son.)

Without an internal restraining force, why should anyone endure or reconcile themselves with misfortunes? Unresolved anguish leads to stress. If one can get away with it, why not lash out? Even when believers can take revenge with impunity, they are enjoined not to do so, but to forgive for the sake of earning God's love. This is nobler than submission to brute emotion; one must replace vindictiveness with tolerance, revenge with forgiveness; not from a passive stance of weakness, fear of conflict or more stress, but from a proactive noble desire to please God taken from a position of strength.

Concept of Falsehood

21:18 We will hurl Truth at Falsehood, until Truth triumph shall triumph and Falsehood be no more. Woe shall befall you for all the falsehoods you have uttered.

If God wanted to obliterate Falsehood, who could prevent it? If Earth was inhabited only by vegetation, would Falsehood exist? Mankind, like animals, could easily have developed unaware of such concepts. Does falsehood exist independent of the mind? Why is there an ongoing conflict with it, when the business of its annihilation could be over in an instant?

It is deliberately ordained as a necessary component in the trial.

The evaluation of man would be pointless if it had free will but no choice, or choice with no free will. Where can this struggle take place other than the mind furnished with free will, the ability to understand it, and choice between polar options of good and evil?

Indeterminacy requires a plausible alternative: the human mind by accident acquired high intelligence and abstract thought, then conceived of the concepts of falsehood, truth, ethics, religion, and conscience, simply because it was capable of doing so.

Though plausible, its uniqueness to man from millions of species lessens the probability. Brain size alone doesn't account for it. If it has evolutionary advantage, there should be wider distribution among the millions of species that have developed hundreds of millions of years before humans. Animals have evolved every conceivable characteristic and adapted to every niche. Its absence in all animal species is remarkably conspicuous.

The Soul (Summary)

The profound disparity between humans and other life forms is too total and absolute to be dismissed as chance. If spiritual awareness has no evolutionary advantage, why have humans developed it? Why aren't such fundamental traits distributed among any other species even to a slight degree? Elephants mourn

dead relatives; this shows animals can come close to spirituality. The claim that spirituality has assisted development of the human species is dubious; a more feasible case can be made that it has impeded human development.

The profound delineation between humans and animals in spirituality, ethics, morality, and deep consciousness, is incompatible with natural evolution.

No other major characteristic is unique to just one species. Not only is there no mechanism in nature that limits its distribution, powerful forces promote it, impelling beneficial traits onto different species. An example is the development of vision. Its spread among species is proportional to its value. All species from insects up have it. All beneficial traits develop and proliferate.

If animals had souls, a major flaw would appear. All species are inevitably related to or evolved from one another, in which case where is the line drawn? What physical characteristics specify which have souls and which don't?

Even within a species, if left to nature, some animals will get souls and others not. A situation inevitably arises where a soulless species reaches a crossover point, after which it acquires a soul. Is the process gradual or sudden? How does the acquisition of a soul proceed? How would animals react to others in the same species, who haven't acquired a soul? A life form either has a soul or it doesn't.

There are surely no half-souls or half measures. How can there be a gradual acquisition of a soul or a fraction of a soul? What does Nature do with these souls after death? If Nature is dumb with no intelligence or consciousness, how does it delegate, arrange, or distribute souls?

If genes responsible for the soul were recognised, could one extract them from DNA and prevent its formation? Conversely, could one transfer those genes to other species to endow them with souls? The theory predicts it can't be done.

Do all animals have souls as claimed by some religions? If so, where in the animal kingdom is the line drawn. Do insects and bacteria have them also? There is little doubt that bacteria are part of the animal kingdom, but what about vegetation, viruses, enzymes, and prions? What physical attributes are required for acquisition of a soul: consciousness, a mind, a brain, multi-cell structure, single-cell organisms, or specific genes?

If we are creations of Nature, the soul doesn't exist; if we are creations of God, it does. Our inexplicable profound disparity with all other life forms together with the absolutely abrupt delineation in spirituality gives low probability of it being an accident of Nature and a high probability to the existence of the soul and intelligent design.

It's All Our Fault No Matter What

04:79 Any good that befalls you is from God, and any evil that befalls you is the fruit of your own deeds.

This premise presents an extremely counterintuitive explanation for afflictions: it is not the fault of others but always invariably our own. Its remedy is equally simple: a change of attitude.

The extraordinary principle proposed here, the acceptance as a firm principle that any misfortune is unconditionally our own fault, can solve a lot of problems. The prouder we are, the tougher this will be to accept, but once this extremely difficult concept is accepted, beneficial changes inevitably occur.

When offended, it's easy and natural to allot blame on others. Alternatively, one could adopt the above precept on faith that it is always, genuinely, and unequivocally our own fault and no other, however blatantly obvious it may seem otherwise. In doing so, a gamut of negative emotions, recrimination, bitterness, anger, revenge, stress, and malevolence are avoided and introspection transforms the misfortune into a valuable lesson. An intrinsic beauty of this is that such misfortunes become less likely to reoccur.

Abraham Lincoln was a brilliant practitioner of the precept. It was not his nature to be discrete; in fact he was impetuous and outspoken. He learnt his lesson the hard way, psychologically scarred by several traumatic years trying to evade a duel provoked by a rash remark. The prolonged agony indelibly taught him the virtue of reticence.

When his generals were losing in the Civil War, he went to great lengths not to criticise or offend them against his inclinations. A detailed study of this inspired Dale Carnegie to write his very influential books.

Adoption of the principle changes the painful misfortune into a positive experience; it makes one better and wiser. The first step is a full unconditional acceptance of blame, against our intensely strong tendency not to do so, however unreasonable it may seem. It has a profound effect on attitude.

In fact the concept is routinely and successfully applied every day in business; managers are totally responsible for their organisations, whatever happens. It inevitably produces better results; introspection highlights faults and decreases likelihood of recurrence. In business less emotion is involved. In personal misfortunes, pain, resentment, recrimination and anger are common. We can always see fault in others, but on rational reflection, one will see that afflictions are often the direct or indirect result of one's own actions.

No one escapes life's afflictions, yet we are always surprised by them. The adoption of the above maxim: "whatever happens is my own fault", optimizes the attitude to benefit from life's misfortunes. It brings improvement by inducing critical inward examination, which is always an excellent place to start.

It also inhibits a natural unproductive tendency to allocate blame elsewhere, which often hides the fault and leads to recrimination. It is the most effective way to recognise, understand, and address underlying causes, which in turn is the most effective mechanism in preventing them.

An invaluable corollary is that it's also easier to forgive and show friendship to others, when we feel we are the responsible party.

Compulsion in Religion

2:256 There shall be no compulsion in religion.

This unambiguous and explicit decree leaves no room for doubt. Forced conversion has no merit and in practice will have the opposite effect. Any compulsion is totally inexcusable.

Religious fanaticism is pushing and secularism is pulling the world away from religious values. The Pope doesn't help by continuing to ban contraception, which could save millions of lives in Africa from AIDS. Banning contraception is based on a phrase taken out of context from the Bible, where after the great flood, Noah is told:

Genesis: 9 "Be fruitful, increase in number and fill the earth."

Based on this verse, papal decree forbids contraception. Man has already overrun the Earth, strained its resources, changed its climate, and damaged the environment. Since Noah, world population has increased by a factor of ten thousand. (Italy has negative population growth and least observes Church guidelines on family planning).

TV evangelism has produced a new class of powerful clergy, and with its power has developed arrogance. Evangelist Pat Robinson invested \$70 million of his personal money in a partnership with Charles Taylor, responsible for the deaths of tens of thousands of civilians in Liberia and Sierra Leone.

Coercion and persecution are futile and counterproductive. If someone is forced into faith, does that have the same value as the person who chooses it freely?

A gross historical fallacy is that Islam forced conversion. In fact Christianity is guilty of more persecution, forced conversion, and ethnic cleansing than all other religions put together. Its astonishing vehemence is unprecedented in any other religion. The Catholic Inquisition persecuted Muslims, Jews, and every other Christian sect.

Consider the Arab conquest of the Persian Empire, its greatest conquest, where exactly the opposite occurred. The Persians readily converted, but the Arabs refused to accept them as Muslims. Iranian nationalists are shamefully ignorant of this. Essentially the Arabs tried at the point of the sword to prevent them converting to Islam.

Though the Persian Empire rivalled Rome and Zoroastrianism had been the state religion for at least 3000 years at the time of the Arab conquest, the conversion was practically total and irreversible.

¹ http://en.wikipedia.org/wiki/Charles_Taylor_(Liberia)

Persian society had a hereditary caste system. The population was divided into four castes, the Imperial court and aristocrats, clergy, the military, and peasant farmers. Social movement between the castes was forbidden, similar to Aryan rules imposed in India. The abolition of the castes, the introduction of the new concepts of equality and the universal brotherhood under Islam, including the legal equality of women who were allowed to own and inherit property for the first time (1200 years before British women) was viewed as liberation from the shackles of an unjust and oppressive system.

Islam introduced great innovations to the Persian Empire:

- freedom to choose one's profession,
- freedom of movement,
- freedom of literacy, previously forbidden for the majority
- encouragement of higher education, (the first university was created around 800AD),
- the adoption of universal laws,
- the unique and extraordinary concept that rulers were obliged to observe the law, an amazing unheard of concept in Persia (and anywhere else) where the ruler's word was the law,
- a judiciary independent of the ruler,
- · laws that were unalterable by the ruler,
- · emancipation of women,
- right of ownership of property by women, (they used to be part of the assets transferred from the debtor to the creditor),

These greatly enhanced the attraction of the new religion. The Persians never attempted to revert to the old system, even though they had many opportunities to do so. On the contrary, when they did acquire power, they did so in the name of Islam, which they claimed had become corrupted by the Arab ruling elite, the Umayyad dynasty.

The actual mechanism that caused the mass conversion of Persians was based on purely temporal laws introduced by Arab governors. It is now fairly evident that they were not concerned so much in converting the population as in governing the vast new Empire efficiently and profitably. The laws they introduced were secular, not specified or based on the Koran with little to do with Islam:

1) Only Muslims could serve in the army. Non-Muslims could not enlist, but instead must pay a military exemption tax. The Koran does not specifically forbid non-believers to participate in jihad, nor does it mention military exemption tax. People soon noticed that those who enlisted became rich from jihad, while those not converted were not only deprived of booty but had to pay taxes. This together with the new freedom to choose any profession and to travel anywhere in the

empire led many to convert and enlist. For many, this must have been more attractive than the restricting old drudgery of farming the same plot of land indefinitely.

- 2) No non-Muslim could keep Muslim slaves. Slaves converted to earn their freedom; slave owners followed suit so as not to lose them. The Koran repeatedly encouraged the freeing of slaves. It also explicitly encouraged marriage with Muslim slaves in preference to free non-believers. Slavery at the time was incomparably different to those in the Roman Empire or America. Slavery was a social classification, unrelated to race and was more benevolent. (Glubb estimates that most of the Caliphs had slave parents, and Islam's greatest military hero Baybar, who finally defeated and put an end to the Crusades, was a slave.)
- 3) Anyone who proclaimed: "There is no God but God, and Mohammad is His prophet", become accepted as a bona fide Muslim and enjoyed all the rights of Muslims. But to do so deceptively was considered treachery and a capital crime. Entering Islam was easy but leaving it dangerous. NB: These were political laws not based on the Koran. There is nothing in the Koran about killing apostates; on the contrary any form of compulsion was condemned. This law was ordained to discourage adoption of the new religion to obtain privileges under false pretences and cause problems in the army.

By this very simple formula one could instantly become a Muslim and immediately free oneself from the caste system and the second class status of a conquered people and obtain equal status to the conquerors; equivalent to instant citizenship in the Roman Empire, which was strictly awarded to chosen elite only after a lifetime of outstanding public service.

It bestowed all the social benefits enjoyed by the conquerors *instantly* onto new converts without any test or system of verification based solely on trust, and freed it them from the feudal caste system that prevented literacy, education, and freedom of travel.

Capital punishment for apostasy may seem harsh, but by the custom of the time any betrayal of allegiance, whether to a tribe or leader met the same fate. NB: the crime of apostasy required the convert to proclaim repeatedly in front of witnesses that he was an apostate; something that probably never happened. In practice it was a politically effective but rarely used deterrent.

Practically the whole Persian Empire converted, which resulted in a great reduction of tax revenues. Arab governors to refused to acknowledge the conversions and continued to extract the exemption tax unlawfully, which caused bitter resentment among converts. A consensus developed that the Umayyads were unworthy successors to the Prophet and usurpers of the Caliphate from Ali, the prophet's son-in-law. This was the beginning of the Shiite movement in Iran.

It is of great significance that in the dispute between the Persians and Arabs, the point of contention was over who were better Muslims. Islam was the rallying

point, not the return to Zoroastrianism. The Imperial Persian religion was a spent force after Islam, just as the Imperial Roman religion was after Christianity.

Resentment culminated in a major rebellion around 80 A.H. A Persian army, formed in Khorassan under the Shiite banner with the intention of conferring power to the rightful descendents of Ali and led by Abu Moslem, defeated the Arab army, which only recently had conquered a world empire. They toppled the regime and killed all eighty members of the Bani Omayyeh ruling clan, except one who escaped by swimming across the Euphrates.

Though the Persians conquered the Arabs, there was never any question of returning to the Zarathustran faith even though they could easily have done so. The converted Persians considered themselves truer Muslims than the Arab rulers. Under Islam, the division of race and culture between Persians and Arabs disappeared. Notably, they didn't see themselves as a Persian army, but as a Muslim army, such was their complete conversion.

Any national or racial division would have become manifest after their victory over the Arabs; but there was none. Not only was the Persian Empire *not* forced into Islam, but after its voluntary adoption, it attacked and defeated the ruling Caliph as unworthy Muslims, unfit guardians of the faithful. Had the Persians been forcibly converted, or had the merits of the old religion compared to Islam, they would have reverted.

Disappearance of racial and national differences in the Islamic Ummah contributed considerably to expanding the Islamic Empire with further spectacular success, from Andalusia (Spain) to the Indian subcontinent.

The voluntary and complete conversion of the Persian Empire has special significance considering the extreme historical stubbornness of Persians in resisting foreign cultures. After conquest by Alexander they didn't become Hellenised, but the Greeks adopted Persian culture. No vestige of Greek culture remained. After the Mongol and the Turkic conquests of the thirteenth and fifteenth centuries, nothing from their cultures was absorbed. The conquerors completely adopted Persian culture, which by then had become considerably Islamic, such that no evidence of the Mongol or Turkic culture now remains, (except regional dialects).

The military conquerors became the culturally conquered. For centuries the court language of the Mogul Emperors in India was Farsi, and much of the arts and architecture there were derived from Persia, including the Taj Mahal, whose architect was from Shiraz.

In the modern era, Iran was among the very few countries not colonized by the West. Among Third World countries, it has shown the most intense resistance to Western culture; whereas most developing countries swallowed Western culture whole, lock stock and barrel. (Non-Islamic countries have shown the least resistance.)

Despite intense resistance to foreign culture throughout its twenty five centuries of recorded history, the Persians totally adopted Islam, precipitating an extraordinarily revolutionary change in every aspect of their culture and society. The cultural conversion was so complete that the only vestiges of Zarathustran culture remaining are New Year ceremonies and their calendar.

Other notable examples of *voluntary* conversion are India, Malaysia, Philippines, and Indonesia, the largest Islamic country whose population was converted by Yemeni traders, with no fighting or compulsion. Conversely the Philippines (named after Phillip of Spain) was forcibly converted from Islam to Catholicism by Spanish conquerors, just as they did in their South American colonies. Spain invaded England solely to forcibly convert it from Protestantism to Catholicism.

For about seven centuries, Spain was under Muslim rule, and much of Europe was under Islamic Ottoman rule, yet there were never forced conversions, but immediately after the accession of Christians to power in Spain, the whole population was forced to convert to Christianity in a demented frenzy of persecution, institutionalised torture, massacres, and ethnic cleansing that lasted for centuries.

Political Aspects

42:08 Had it been God's will, He could have made them all of one religion.

42:13 He has ordained for men the faith He has revealed to you and formerly enjoined on Noah and Abraham, on Moses and Jesus, saying: "Observe this Faith and be united in it>"

02:62 Believers, Jews, Christians and Sabaeans... whoever believes in God and the last Day and does what is right shall be rewarded by their Lord; they have nothing to fear or regret.

10:47 An apostle is sent to every nation.

13:38 Every age has its scripture.

16:36 We raised an apostle in every nation, saying "Serve God and avoid false gods."

21:95 He that does good works in the fullness of his faith, his endeavours shall not be lost; We record them all.

12:112 This is no invented tale, but a confirmation of previous scriptures, an explanation of all things, a guide and a blessing to true believers.

46:13 Those that say: "Our God is God," and follow the straight path shall have nothing to fear and regret. They shall for ever dwell in Paradise as a reward for their labours.

Unlike any other major religion, the Koran clearly states there is salvation in other religions. A false prophet is unlikely to make such a claim; it undermines

the basis for the new religion, especially considering the Jews were antagonists and fought against the Prophet.

It undermines proselytizing, implying there is no need for Jews or Christians to convert and can observe their own scriptures for salvation. Politically, this is a strange stance, needlessly weakening its own position. Though unusual and unprecedented for a new religion, it's totally compatible with the notion that there is one God, the same God worshipped by the Jews, Christians, Muslims and others, and that Mohammad was but one of the many prophets sent by Him; also that he didn't originate the new philosophy, but was confirming the monotheistic premise of Abraham, Moses, and Jesus, which for various reasons over the centuries had become corrupted.

The economy of Mecca was based entirely on pilgrimage to idols and the trade it brought. The prophet himself as a merchant depended on this. Materially, he had nothing to gain from his stance and everything to lose. By condemning idolatry he threatened the very existence of the Meccans and assured their enmity, even though he had lived among them for many years in respect, peace, and comfort. The revolutionary turn was completely out of character. For forty years he had shown a conformist compliant nature, earning the name "Amin" the trusted. He had not shown any previous rebelliousness nor any attempt to gain political power. The attitude jeopardized his own material and social interests in exchange for remote abstractions of the oneness of God and the falsehood of idolatry.

12:103 You shall demand of them no recompense for this. It is an admonition to all mankind.

Despite the Prophet's financial hardships, the above verse forbids any recompense as it might detract from the value of the message; a fine way for a false prophet to benefit materially, especially one in penury. As a result of his preaching, all his worldly possessions had been confiscated by the Meccans as well as those of his family and followers. Having lost his only source of income from trade, the Prophet and his followers were reduced to years of poverty and hunger, exiled in the barren desert. The Meccan population were forbidden to sell them food or deal with them in any way.

The more one studies his policies, the less likely he originated them and the more they fit an age old pattern; messengers admonish people with total disregard to their personal well-being or worldly benefits.

Until he began his preaching, Jesus too had lived a life of peace and quiet with no sign of rebelliousness. He too, in a discontinuous sudden transformation of character, adopted a position that drew the fatal enmity and persecution of the Pharisees for the sake of spiritual abstractions; with nothing to gain and everything to lose. Following the trend of previous prophets, his teachings brought no prospect of material gain. After two thousand years of scrutiny, Jesus' motivation is still inexplicable if a false prophet.

If the prevailing system had nothing wrong with it, sending prophets would not be necessary. In a corrupt system, a prophet sent to change the system will meet resistance from those with most to lose, institutionalised clergy.

When Moses was commanded to go to Egypt, he tried to excuse himself because of the charge of murder against him. What material gains could he have made from this dangerous mission? Moses had already abandoned his people and was comfortably settled elsewhere (for 60 years according to the Bible). Pharaoh would have killed him on the spot had he not displayed extraordinary miracles.

Zarathustra quite likely was a true prophet, whose doctrine was later corrupted. Historical evidence for this actually exists in the Mazdak movement, where clerics deliberately changed and politicized the creed centuries later.

It would be unfair, if some nations were warned and not others. The above verses clearly state that admonishment has been widespread, though we know little about them.

7:170 As for those that strictly observe the Scriptures and are steadfast in prayer, their reward shall not be lost.

Religious laws are *means* to test faith, not universal absolute values. The same God permits alcoholic drinks for Christians and Jews but not for Muslims, but salvation is for all. The foremost importance is the Primal Covenant. Salvation is attainable for those who observe regulations of their born religion.

Cultural Influence

17:84 Each man behaves after his own fashion. But your Lord best knows who is best guided.

We're unable to assess the piety of Aborigines because we can only judge them by our own values, which are alien to them. They cannot be judged them by principles unknown to them. God best knows who deserves salvation and the ethical standards that apply.

Each is judged by the laws of its religion. The basis of evaluation is spiritual and depends on the amount of warning. It explains why Jews, with more warning than others, are afflicted more than others. Native Indians have the least burden of religious laws because they have the least amount of admonishment.

10:44 Indeed, God does not in any way wrong mankind, but they wrong themselves. The day will come when He will gather them again, as though they had stayed away but an hour.

Many fail to find satisfactory answers about absolute truths or the meaning of life in their religion and are put off by its irrationality and incoherence. In the Age of Reason the threshold of tolerance for contradictions, flaws, and incompatibility with science is low; but there is no escape option. We are endowed with deep consciousness, spiritual awareness, and conscience for participation in this cosmic struggle. Infinite reward is not compatible with an easy search.

A lifetime is sufficient time to resolve the issue; after resurrection it will seem an hour. How short the test will seem then, how easy the trials, and how petty the hardships, faced with the prospect of irredeemable eternal doom. The issue cannot be taken lightly; the stakes cannot be greater. Ignoring it is reckless, apathy is fatal, and dismissing it is irrational and foolish. One will never know with certainty about life after death until resurrected; by then it's too late.

77:50 In what revelation after this will they believe?

Revelations must not prove Divine authorship, thus Scriptures must appear compatible with human authorship; thus should contain some faults. If more revelations were sent, they would still resemble those already sent.

28:49 Say: "Bring down from God a scripture that is a better guide than these and I will follow it, if what you say is true!" If they make no answer know that they are the slaves of their caprices. Who is in greater error than the man who is led by his caprice without guidance from God?

The Scriptures are the borderline level of proof one can expect, the Koran more than others. It is the most recent, is in its original language, has the least contradictions and flaws, and is the most coherent and eloquent.

It's extremely unlikely that a major work of philosophical literature appears straight out of the blue influenced by none before it. Arabic literature before it was practically nonexistent (Arabic was a spoken language and only some poems were written). Its transcriber was not literate, had no education, and came from a basically illiterate society, thus the burden of faith is proportionally heavier for Muslims.

41: 52 Say: "Think: if this Koran is indeed from God and you deny it, who can err more the man who openly defies Him?" We shall show them Our signs in all the regions of the earth and in their own souls, until they clearly see that it is the truth.

04:39 What harm could befall them if they believed in God and the Last Day and gave in alms what He has bestowed on them?

51:04 None but the perverse turn away from the true faith.

Do disbelievers reach their conclusion after dispassionate rational evaluation? Does emotion play no role in their decision? Is the strength of conviction proportional to the evidence? If atheists can't produce evidence (which they can't), their conviction is led by fancy, a dangerous guide to entrust the eternal destiny of the soul. Disbelief is not a passive stance of default, but a deliberate act of denial. There is no proof that God does not exist and compelling circumstantial evidence that He does. Subconscious awareness of our Primal Covenant lingers, but many deliberately disregard it.

Other aspects are the infinite value of the reward, the ease faith can be attained, man's unique ability to recognize abstract truths, the otherwise inexplicable awareness of spirituality, morality, conscience, justice, deep consciousness, and recognition of patterns to events.

Deliberate choice to ignore these is active opposition. The verse says if we can find no better philosophy for the meaning of life, the deliberate choice to disregard circumstantial evidence and other signs can be classified as a perversion. Some choose caprice as their god; others the Creator of the Universe.

Severity of Hell

Is the punishment of Hell disproportionate and unfair? (Jehovah's Witnesses are so appalled by Hell that they have disposed of it altogether.) It's part of our Covenant, whether we like it or not. Penalty clauses are necessarily unpleasant to act as deterrent, their raison d'etre. There is no way out of the contract, no escape clause. However unfair it may appear, there is nothing we can do about it.

Also it's a bit presumptuous to consider ourselves qualified judges of celestial justice, arbiters of fairness on a cosmic scale. Only in the last fifty years has mankind begun to appreciate the immorality of slaughtering other people for reasons of national interest (the US still hasn't). Most perpetrators of wars didn't even attempt to justify themselves, notably the English, French, Italian, Japanese, and American colonialists of the 20th Century.

When Iraq massacred Kurdish civilians with chemical weapons, there was barely a whimper from the West, (who had supplied the facilities and chemicals). Nor is there much condemnation of Israel for massacres it regularly carries out on Palestinians. The U.S. vetoes every condemnation of Israel even for blatant war atrocities, torture, and extrajudicial murders (its own share of these is increasing).

Killing people is wrong, but billions of animals are slaughtered every year for food and fun. Do animals think their slaughter is fair? Some may say that animals don't understand these concepts, but this puts them in the same category of children. Is it fair to slaughter children because it may someday become economically profitable? They too won't be able to complain and may feel exactly the same about it as animals.

We don't upset ourselves much over the hundred million sharks and dolphins killed every year for no reason at all, nor the species wiped out needlessly, nor the mean conditions of animals in factory farms, (including the abominable torture of force fed geese and ducks to make foie gras), nor the agony inflicted on fish by sticking steel hooks into their throats and enjoying the ensuing struggle as they thrash desperately in great agony to stay alive (considered a very soothing pastime), nor clubbing to death baby seals sacrificed for another mysterious entity, fashion; nor the natural habitats deliberately sacrificed for the production of toilet paper. Surely animals don't find these fair. Are we the only life form deserving justice? Animals have as much right to life as we have; they have lived on earth tens of millions of years before us.

We may be stronger, but does that give us the *right* to destroy them? The only absolute justification we have is the law of the jungle: we can do what we like with them because we are stronger.

If powerful aliens destroyed the human race, except for a few to display in cosmic zoos or to test alien drugs and chemicals, would they be acting any differently? If they farmed humans as food, they would be justified by applying exactly the same standards that we use against animals. Aliens may even have very important reasons for doing so, their equivalent of economics, sport, fashion, or fun, which we may consider unjust or incomprehensible, just as our reasons are to animals.

But if might is right, we can't protest at whatever is in store for us from an infinitely mighty source, especially as we owe our very existence to it and are firmly and irrevocably bound by a solemn Covenant.

Are we in a position to ordain absolute values that apply across the cosmos? Can we now make changes to eternal values such as justice, to which we are only recent acquaintances? Are we so wise that we can now pass judgment on the wisdom of God?

The severity of Hell is proportional to the value of the Covenant. If not for it, we may have disappeared as a species or we may have remained another primate species screeching and hooting on treetops, to the amusement of the species that did accept the Covenant.

Conversely, we only need be loyal to this Covenant (not all that difficult really) to gain an infinite reward of peace and comfort. It especially behaves us to do so since we are all signatories to it.

Also doing so makes us better people, more self restrained, mentally healthier, less likely to succumb to depression and despair, and better able to reconcile with life's numerous inevitable misfortunes.

Summary

The basis for faith in God can be summarized:

- At some point in our primordial past, every soul that has ever lived in the
 past, present, or will do so in the future, was brought to life to bear witness
 to an absolute truth: the existence of the one and only true God, our Creator.
- This Primal Covenant is the source of our profound difference with all other life forms, despite genetic similarity. It is also the reason for our souls, deep consciousness, conscience, ethics, and obsession with spirituality and the supernatural.
- Every soul is bound by the Covenant to testify in this life to the existence of God, and in deference to observe religious chores and regulations, created for the purpose.
- Necessarily the test has to be in a state of indeterminacy.
- Sufficient faculties to understand the responsibility and total freedom of thought to make the decision are provided.

- An apostle or scripture has been sent to every nation giving suitable admonitions and warnings. All have been warned in one form or another.
- Deep consciousness and an innate sense of ethics, unique among life forms, prompt us to appreciate universal truths.
- A still small voice inside occasionally reminds. If a definite choice to deny
 it is made, one effectively leaves the race and is often granted much of its
 worldly desires.
- Those who seek the truth will find it. There won't be a literal dialogue with God, nor miracles. So long as they are genuinely receptive to faith, they will sense it.
- If there is nothing out there, the absolute nothingness will somehow be conveyed and felt.
- If there is something out there, humans are uniquely set up to become aware of it, within the confines of Indeterminacy.
- Humanity is not collectively delusional or paranoid.
- The Scriptures provide sufficient evidence for the theory, the Koran more than others. Though Mohammad went through immense extremes of fortunes, the tone of the Koran remains.
- The fact that he had been illiterate is notable, as are the scientific compatibility of many claims of the Scriptures.
- Of further significance is the fact that every other theory on religion and practically every theory on science before the modern era has turned out to be wrong.

Stages of faith

- The unique human attribute of attraction towards truth is a vital necessity.
- Another requisite is humility; to minimise the impediments from natural prejudice and cultural bias.
- With maturity an aspiration to noble values and appreciation of spiritual values develops.
- Awareness of circumstantial evidence begins to develop. An open mind will reflect rationally.
- Critical examination reveals a significant probability for viability; evidence for these is discussed in this book.
- The assumption is made that the theory is valid; the benefit of the doubt is given. Faith is adopted.
- The Scriptures present more circumstantial evidence. The basic doctrine is analysed. Coherence imparts cogency.

- If there is nothing out there, faith becomes a strictly internal psychological matter, unable to affect external events.
- If there is something out there, significant feedback will develop and become noticeable.
- This feedback further stretches the probability for viability.
- The unique human entity of wisdom, essential where conclusive evidence is lacking, can discern coherence in the theory.
- It can also discern an ethereal resonance from our collective primal covenant that explains our profound difference to all other life forms, with which we share our environment and most of our genes and genetic composition.
- A recognisable pattern of actions and events constitutes ethereal feedback.
- The pattern even permits some degree of prediction.
- Though it becomes increasingly apparent we are not alone, feedback remains limited by Indeterminacy.
- Strengthening spiritual awareness reinforces faith, which reinforces awareness, in a virtuous circle.
- A fundamental change in perspective on the world develops.

CHAPTER 10 THEORETICAL DEDUCTIONS

Into the fray

The best way to enhance awareness of the existence of God is to venture purposely into the spiritual world for actual experience. The search for absolute truth is not just speculative and theoretical; it can be experienced in the real world. We can reinforce its semi-conscious awareness by actively engaging it with reflection, meditation, and prayer until its resonance is felt. Mankind is not delusional.

The process is made easier by abandoning prejudice, infatuation with materialism, and the uninhibited pursuit of pleasure.

Persuasion doesn't develop from mercenary acceptance of Pascal's Wager, even though its algorithm to maximise benefit and minimise damage is valid. A more persuasive case comes from coherence of the theory and recognition of a correlation between actions and feedback in the real world; a pattern that defies chance occurrence, raising the probability of supernatural order and intelligent design. This and an ethereal spiritual resonance are the real sources of conviction for believers.

The theory says we have been endowed spiritual awareness from a previous life. All have sworn to uphold the Covenant in a state of indeterminacy. We are engaged in a conflict between good and evil. These entities don't require our assistance, but are created for the purpose.

Everyone experiences spirituality even though we lack sensory receptors for it. Animals have more developed sensors, yet appear devoid of it. The profound separation between humans and animals is scientifically inexplicable but totally compatible with the theory.

The notion that God's power pervades every entity in the universe induces a fundamental change in perspective between believers and non-believers. The first step to cross the spiritual bridge is to develop a sincerity in the search; "Seek and ye shall find."

Christians feel the strength of their conviction despite numerous faults and contradictions in the Bible. They don't hang on the literal meaning of every word. A vibrant spiritual force sustains their faith, reinforced by an ethereal

communication with the supernatural. This may explain why over half the population in the USA believe that humans were created in their present form, not descended from bacteria, while another third believe in evolution but believe God created humans separately, and only about ten percent are atheists. If ninety percent of Americans are irrational, what other scientific theories are totally refuted by them. Where else are they so illogical?

Atheists are not *innately* blind to this, but have become so by choice. They attribute the attraction of faith to the peace of mind it brings, its reduction of stress, evoking a more positive outlook on life, helping better to endure life's numerous afflictions, etc. If so, these characteristics should have developed in other life forms too.

Its absence in animals isn't because of their peaceful stress-free lives. Every moment is threatened with violent death; every day is preoccupied with the constant search for sustenance and safety. We could hardly be more dissimilar; most of mankind is struggling to reduce food, violent death is rare, peaceful coexistence is normal, and extensive health care is generally available.

Scientists in general reject the supernatural because they are conditioned by training to do so. While examining the intricacies of Newton's pebbles by the sea-shore, they are unaware of the ocean of truth beside them. Many scientists ignore faith due to lack of physical evidence, but they don't have sufficient evidence for its refutation either. There happens to be more circumstantial evidence supporting faith, than opposing it. Coherence of the theory and our unique awareness of spirituality impart cogency. Refutation requires solid evidence, which is conspicuously lacking.

A general misconception is that science can refute religion. The spiritual world, a subjective minefield, is a no go area for science. This discourages its scientific evaluation even though science has proven invaluable in every other field of human endeavour. Based on the theory's coherence, scientific compatibility, and circumstantial evidence supporting it, a logical conclusion is to consider the theory potentially viable.

If the spiritual world is a fabrication of the mind, increasing education and rationality should diminish it, but the opposite occurs. To the confusion of scientists and exasperation of atheists, not only is faith in the supernatural not diminishing but growing, manifest in the resurgence of religion, fundamentalism, paganism, mysticism, superstition, astrology, and sorcery. Such irrational behaviour coming from the most rational species is strange, inexplicable, and significant. Why are animals more rational?

Humans have developed the most sophisticated rationality, more than any other species, yet having seen its immense success, they hardly use it for the most important subject of all: the eternal destiny of the soul.

Instruments of the trial

The trial nature of life explains the gross inequality among humans. Many subsist in squalor, others wallow in excess. The vast disparity is unique to the human species.

All the comfort and distress of this world will be insignificant compared with those of the next. If there were no life hereafter, the disparity would be unjust. The poor, through no fault of their own, are locked into a lifetime of poverty and deprivation, from which it is almost impossible to escape. (The true fact of life that should be taught to children is that the poor and uneducated are locked into poverty.)

In the next life the poor may bless their poverty as a factor for their salvation, while the rich may curse the wealth that so pre-occupied them. The Koran says unbelievers are granted their worldly wishes, in which they will revel until too late. Believers easily seduced by worldly pleasures are perhaps economically challenged for their own good.

The Bible takes this to an inexplicable and unjustifiable extreme:

"It is easier for a rich man to enter the Kingdom of Heaven than a camel to pass through the eye of a needle."

It is impossible for the rich to go to Heaven, but not murderers, implying possession of wealth is the greatest crime. Mysteriously, no mention is made of this in the Old Testament. In the New Testament Jesus made only a passing reference to it while explaining another matter, as an aside. If the rich young man hadn't been so obstinate in questioning Jesus on how to attain salvation, the world would have remained completely in the dark on the greatest of all crimes. Its status as a great sin is totally incompatible with its cursory reference. How does the Bible reconcile it with the great wealth of Abraham, David, and Solomon?

Jesus never actually forbade possession of wealth, which is strange considering its great crime status. He never told his followers to give away their money and live in poverty (they were poor anyway).

If a pious Christian were to inherit a fortune, through no fault of his own he would, according to the verse, suddenly incur damnation (rich TV evangelists take note).

This claim has historically been tremendously instrumental in alleviating the rich on their deathbeds of the crime of wealth, greatly to the benefit of Church coffers.

The Koran says the damned, not the rich, will stay in Hell until a camel passes through the eye of a needle which is more coherent.

Trial Handicaps

Each individual is tested separately. Sins are not transferable. "Sins of the father" and "Original Sin" contradict basic premises of the Scriptures that each is responsible only for its own actions, which are like a millstone hanging from the neck.

The test is not the same for everyone. Genetic and environmental factors induce varying degrees of predisposition towards gambling, drinking, gluttony, lust, theft, homosexuality, etc. They don't *force* the individual to sin but tempts them to do so, which can of course be overridden by free will and self restraint (the jihad against the self).

In the late 1990s autopsies on homosexuals¹ showed that part of the brain near the anterior hypothalamus was half the size of heterosexuals and about the same size as for women. The implication was momentous. Does this present physical evidence that homosexuality is a born trait and thus cannot be considered a sin? Resolution depends on whether the reduction of brain size is genetic or environmental. Is one born with the feature, leading inevitably to homosexuality (contrary to our theory) or does it develop with adoption of homosexuality following a genetic inclination (very compatible with the theory)?

Genetic and environmental predisposition to vice is an essential part of the theory. A genetic predisposition to virtue would detract from the trial. All must be subjected to temptation and have a natural propensity to sin in some way or another. Submission to temptation must necessarily be more pleasurable than restraint.

Based on this theory, the brain shrinking occurs after submission to and active engagement in homosexuality. If the same individual had not succumbed, the shrinking would not occur. Active homosexual lifestyle induces behavioural and other physical changes, which is why they are often easy to recognise from their behaviour. (Evidence shows that a cold distant relationship with the father increases the propensity for the son to become homosexual).

One can submit to environmental or genetic propensities for gratification or one can combat it in deference to morality. Everyone is tempted by genetic or environmentally predisposition to vices as a necessary part of the test.

Similarly some are born with a propensity to smoke, due to their reduced capacity to produce dopamine, whose production is stimulated by nicotine; but there are not *forced* to smoke. They may never start smoking or may quit with considerable will power.

Significantly and in perfect correlation with our theory, such vices (gambling, intoxicants, gluttony, homosexuality, etc.) have no evolutionary advantage, yet

by Simon LeVay http://serendip.brynmawr.edu/bb/neuro/neuro01/web1/Rana.html

despite this, are uniquely extensive among humans and rare among animals. Is the result of millions of years of evolution, the development of unproductive and damaging activities? Though evolutionary aberrations, they are fully compatible with our theory. Other factors required are propensities for vanity, pride, arrogance, jealousy, greed, dishonesty, corruption, and injustice.

Poverty, deprivation, and injustice have always existed, but there has never been such a level of affluence and comfort. The material state of humanity today, considered by any generation in the past, would seem blissfully ideal, too good to be attainable, heaven on earth. But are today's affluent societies living in a state of permanent bliss? They should by secular standards, but not by our theory.

The middle classes of most countries today live better than any king of the past. They have better quality of life, better variety and quality of diet, health care, security, safety, transport, physical comfort, entertainment, recreation, and education.

Court music with comic relief from a court clown hardly compares with around the clock entertainment freely available today. Most films cost a million dollars per minute. The sum entertainment value available on average TV channels is tens of millions of dollars per minute; all free at the whim of the individual any time of day.

The cost to supply this level of entertainment and information is billions of dollars per day. The fact that they are shared by millions of others hardly detracts from their value. (If anything people prefer to share media experience, which is why they pay extra to attend cinema and concerts. Most would be appalled if such expenses were made for them alone or if they were the only person in an audience). All this is more than any king in the past could have dreamt for.

With all our luxuries and comforts, why are we not living in a state of constant bliss, as all humanity from the past were certain we would be? Why are other life forms, whose quality of life hasn't changed in millions of years, appear to be more at peace with their lot, even though starvation and violent death threatens every instant of their existence? Why is mankind so difficult to please, unlike all other life forms?

How interesting that this anomaly fits perfectly with our theory that we are engaged in a grand design to be tested, participants in the battle between good and evil and is incompatible with evolutionary development and scientifically inexplicable, especially considering our genetic similarity?

Necessary requisites for the engagement are an impatient nature to draw us into the fray, an insatiable nature to keep us there, revelations to specify rules, deep consciousness and morality to appreciate them, conscience to motivate, an infinite variety of temptation and pastimes and a natural inclination towards vice.

Self imposed limits

Good and evil were created to supply the opposing forces for the field of conflict. The forces of good do not need our help. Free will allows the combatants to move freely. The field isn't level but inclined towards one pole; virtue requires effort. A natural inclination towards the good would present a design flaw. Perfect correlation adds coherence to the theory.

Evaluation of claims in Chapter 4 gives a rough estimate for the overall probability by factoring the probabilities for all the claims. If ten claims turn out to be correct, each with a 50/50 chance, the sum probability for correctly guessing them all is one in a thousand. In Chapter 4, over twenty claims are assessed, each of which has less than fifty percent chance of being correct; this imparts considerable credibility. Terrestrial fine tuning in Chapter 7 gives even greater coincidences. The staggering degree of improbability, involving a hundred orders of magnitude, is beyond human comprehension.

For example, if it wasn't for the ozone layer, intelligent life could not have developed. The layer is a mere three millimetres thick (equivalent).

If the average global temperature were to change by a mere ten degrees over centuries, there would be cataclysmic weather change, yet some planets fluctuate by 500 degrees every day.

If Earth hadn't collided with Mars and formed Moon, intelligent life could not have developed. If we didn't have Jupiter to mop up asteroids, we would be bombarded catastrophically much more often.

Hundreds of highly improbable events had to occur for intelligent life to develop. Ross has compiled dozens of very unlikely coincidences (in Tables 2 and 3). Our theory requires viable counter arguments for these, currently remarkable for their scantiness.

Despite the astonishing probabilities, faith is not based on these but on coherence in the theory, spiritual awareness, and wisdom.

Atheist precepts such as "it is obvious there is no God" or "belief in God is wishful thinking by simple people" are simply *conjecture*. It doesn't say much for a creed that is based on plenty of personal emotion and little evidence especially when confronted by so much circumstantial evidence for intelligent design.

An atheist counter argument to the fact that the existence of God cannot be disproved is that there are many other theories that cannot be disproved, so should all those be considered viable also? But most of them lack coherence, are devoid of circumstantial evidence, are not supported by numerous coincidences of many orders of magnitude improbability, are not backed by compatibility with science, nor resonate with our ethereal inherent spiritual awareness or wisdom.

Spiritual awareness

Consider a hypothetical strictly rational world, in which religion and the supernatural are unknown. As scientific knowledge increases, a point will inevitably be reached where the notion for the possibility of deliberate design becomes apparent because of the numerous coincidences suggesting it. From this awareness, the implication of the existence of a Designer will develop.

Significantly, the exact opposite has occurred. Widespread spiritual awareness developed from prehistory, when scientific knowledge was insignificant. Only in the past few decades has scientific evidence compatible with the existence of a Designer been discovered. The extraordinary development of spiritual awareness implies there are two alternatives:

- 1) Belief in God is based on intelligence; thus any species, earthly or alien (or even computers) that attain a critical level intelligence will inevitably consider the existence of God.
- 2) Humans have been bestowed spiritual awareness by design.

If the first alternative were true, one would expect to see inklings of spiritual awareness in intelligent animals. The fact that none is observed detracts from the first alternative in favour of the second. One would also expect correlation between intelligence and spiritual awareness. No animal has it; all humans do. Spiritual awareness and religious affinity are unrelated to intelligence. Among the most religious people have been Newton and Galileo, while among atheists Paul Dirac and Richard Feynman; all extraordinary geniuses.

Remarkably, the orang-utan and gorilla are more intelligent than the chimpanzee, which has the most similar DNA to humans. The most intelligent species are not primates; intelligence is not related to genetic proximity to humans.

By increasing brain size through genetic engineering, humans may increase the intelligence of animals to human levels. As intelligence increases, would a threshold level be reached which induces spiritual awareness? If spiritual awareness is based on the soul, they won't. With increasing intelligence, does deep consciousness or conscience develop automatically?

The link between intelligence and consciousness is tentative. Humans of diverse intelligence have the same uniform degree of consciousness and conscience, whereas most animals have little consciousness and no conscience.

Computers have attained parity with human intelligence, or soon will. In several decades, they will exceed it considerably (never mind what will happen in several centuries or millennia). Will super-intelligent computers automatically develop consciousness, conscience, or spiritual awareness? This theory says they won't, because these are dependent on the soul. Secular science suggests they will because the computing mechanism should not matter.

By the year 2060, computing power will have reached levels that could help determine the answer to such hypotheses. (After decades of detailed study of the Bible, Newton deduced that the end of the world could be in 2060.) It should be an interesting period.

Consider the hypothetical case of alien contact. They must have great intelligence to have done so, but without souls, they should not have spiritual awareness, which negates the first alternative and strengthens the second.

The most significant outcome from alien contact would be the result of discussion on these factors, which will help determine the validity of the theory of the existence of God. But since this must remain indeterminate, such contact is unlikely.

Human tyranny of animals

According to this theory, sanctity of human life is due to possession of an eternal soul. Killing a human may affect the eternal fate of the soul by depriving the victim sufficient time to make its peace with God (this was the only basis for the original law exempting the insane from execution in the West). The secular basis for the sanctity of human life is solely for self preservation.

Basically three suppositions justify humans killing animals:

- 1) It is the natural order; animals kill each other all the time.
- 2) It's necessary for food and preservation of human life.
- 3) Farm animals owe their lives to their breeders, who rear, feed, and protect them.

In the first case, humans must consider themselves an integral part of the animal world, a sophisticated animal species, no more. This implies animals have as much right to life and resources as we do, but this is not acknowledged. If powerful aliens treated us the way we treat animals, they would be justified by our standards.

If we don't consider ourselves animals, we shouldn't emulate them in justifying our right to kill. "Might is right" applies only to animals. A short step away is the justification of killing other humans or the subjugation of one group by another, simply because they can do so.

The second supposition may have been valid in the hunter gatherer era, but isn't so any longer. Animals consume five kg of protein for every kg of meat protein. Not only are they not essential as food, but they inefficiently consume a considerable part of food resources. Also cattle emit a fifth of the world's greenhouse gases.

By extrapolation can the second supposition justify killing humans in a famine; taking one life to save another? Can it justify cannibalism during famine or war for lebensraum and resources? If the third supposition of animal farming were

valid, it could be extrapolated to humans. If one group were to protect, rear, and feed another group, would this give them the right to kill them? Bear in mind absolute values are considered. Other suppositions can be made with no moral justification, such as we are stronger than animals, therefore we can treat them as we wish; or we are more intelligent than them. Again, these become frayed if applied by one group of humans on another.

If humans are just another animal species, such extrapolations become valid. Claims of ownership of foodstuff and territory are subjective and arbitrary but are used to justify killing billions of insects daily. The reasons cited for preservation of wild life and natural habitats are their potential source for future drugs and medicine for humans not their natural right to life and existence. It appears we have a monopoly on that. The right to kill animals, simply because we can, derives directly from the law of the jungle.

It is difficult to condemn ethnic cleansings in absolute terms. The premise "might is right" can justify killing off weaker members of society, tribes, or races. Though unlikely during peace and prosperity, it could become viable in apocalyptic times. When civilization teeters on the brink, absolute values will determine how it will treat its weak. (During the siege of Leningrad in WW2, children were snatched from the streets and eaten). Our only absolute values are ordained by God. Our only moral justification for killing animals derives from the Scriptures, otherwise animals have just as much right to kill us.

Source of ethics

Western secular humanism derives its principles from Christianity but renounces God. The supremacy of human life and liberty are human centric values. All other life forms can make exactly the same claim for their own species, including aliens. Absolute values are independent of human opinions or consensus; if no God, no absolutes.

Most societies have unwavering believers and atheists, while an uncommitted majority sways in between. Both sides try to influence the sway. Some Christian clergy think having gay or atheistic clerics makes the Church look progressive; but sadly it just shows the sheep is leading the shepherd. In Western democracies, laws are drawn not for upholding morality, but for the better functioning of society. The opinion of the majority cannot be opposed whatever it is. A major consideration in legislation is the practicality of enforcement.

The puritan Pilgrim Fathers would be appalled by the morals in the West today. Islamic countries base their laws on Islamic morals and show less propensity to secularise them. For centuries Pacific island natives practiced incest, South American natives human sacrifice, and others cannibalism. If Bible based morals hadn't been imposed on them, they would still be practicing these today.

Today the opposite occurs, moral laws are degraded for the wishes of the masses in an inevitable democratic slide to moral decadence.

List of Explanations (Summary)

Since a theory of everything must be able to explain everything viably, a brief explanation of the more important issues is presented:

- 1) The meaning of life. For reasons beyond our scope, God has ordained the world the stage for the battle between good and evil. The entities of free will, deep consciousness, conscience, and spiritual awareness have been bestowed to engage in the combat. Without them it would be meaningless and impossible. The field is polarised, preferentially towards sin, which is necessarily alluring, countered by less appealing piety. Myriad temptations and pastimes are devised. Everything in life is fleeting and will become worthless except thoughts and actions related to the battle; these transcend this world to the next.
- 2) Life after death. The struggle would be inconsequential if death ended all. If this is the only life, why would anyone participate in the spiritual struggle, forgo life's pleasures, and override evolutionary imperatives? Most would opt out, which would make the premise flawed; thus the necessity for resurrection, life after death, and reckoning. Since Heaven and Hell appear vastly distant beyond the unfathomable dark chasm of death, the rewards have been made of infinite duration as compensation. Infinite value is commensurate with the great value of faith from God's perspective.
- 3) The soul. Our bodies will rot in this world but the entity of life will continue into the next. Our true being is not the sentient body, but the conscious entity temporarily occupying it.
- 4) Man's role in the universe. Of all life forms we know, we alone are participants in this cosmic struggle, but other life forms are also involved though we're totally unaware of them. Whether there is alien life is irrelevant to our fate.
- 5) The disparity between humans and animals. We have souls and they don't. Their every action is guided by genetic and environmental vectors directed by evolution. On the other hand, we are inextricably involved in a spiritual conflict with religious regulations, conscience, and morality. Uniquely, our actions have surprisingly little bearing on evolution and sometimes oppose it. If animals didn't exist and we were the only life form or if our genetic composition was very different, the high probability of an ordained plan might become too apparent. Answers to the questions: "How did we get here?" and "How were we formed and by whom?" might become too obvious.
- 6) The nature of conscience. We are equipped with conscience, a strangely unique awareness of good and evil, an appreciation and sensibility of its effects; essential for a meaningful engagement. This explains why animals don't have it otherwise inexplicable; especially since we share over 98% DNA. We differ in brain size with some primates by half a kilogram, but some animals have brain sizes eight kilograms greater.

- 7) The nature of deep consciousness. Scientifically inexplicable, unique to mankind, another strange quality required by the theory to enable us to appreciate the issues involved and transcend genetic and environmental inclinations. This contrasts with all other life forms, whose response to internal and external stimuli is governed solely by evolution. With consciousness, we are able to comprehend and empathize with other individuals as separate conscious entities, to be aware of spirituality, and philosophise. Without it, we would be incapable of these, which would preclude us from the trial.
- 8) What is good and evil? The entities of good and evil have been created as complementary antagonists to supply the potential energy and driving force for the conflict. Conscience and spiritual awareness are the charges that draw towards one pole, and temptations and unbridled pursuit of pleasure to the other. Deep consciousness allows awareness of regulations and consequences. Conscience acts as a motivator; free will allows movement in any direction in this polarised field.
- 9) Wisdom, another unique human attribute, enables discernment between good and evil, the ability to subjugate pride to a noble cause, to recognize the extent of one's prejudices, which are impediments to the discernment of truth, to derive the will and determination to override genetic and environmental inclinations, to recognise the viability of faith, and the ability to perceive truth, especially when evidence is insufficient. (Its closest analogy in mathematics is fuzzy logic).
- 10) Preordained fate. Every action in the universe is preordained except those of humanity, granted freedom by free will. We are not locked into any course of action or destiny. (Identical twins with identical genes and environment differ substantially). To further reduce predetermined factors, the individual will receive feedback depending on its thoughts and actions. Miraculous signs violate indeterminacy, thus the feedback is subtle; statistically significant for those who seek the truth and ignorable for those who don't. The fate of each individual is in its own hands. Unlike every other activity in the universe, humans determine their own fate.
- 11) Happiness. Of all species, man is the most obsessed with the pursuit of happiness. Animals, especially non primates, exhibit strictly prescribed limited emotional states. Evolution has not seen fit to endow any animal with the ability to smile. Because of this and the general lack of communication between species, we aren't sure whether they seek intense happiness, contentment, or just avoidance of stress. We appear to experience much greater variety and intensity of emotions; ecstasy, pleasure, pain, and every emotion in between; suitable for our theory. These would be compromised if we could only experience tepid emotions. Evolution has allocated limited emotions for animals, because they get on with their lives better that way; avoiding depression on realising that they and their progeny will all either be violently killed and eaten in their prime or starve. Humans, though possessing more than sufficient resources to feed and procreate

in a state of safety and comfort, become stressed, depressed, and even suicidal (another unique trait of humans) for reasons incomprehensible to animals and incompatible with evolution.

- 12) Science and Supernatural. Science is the rational evaluation of natural phenomena. Its supreme quality is the ability to predict events. The supernatural by definition cannot be quantified or predicted (otherwise it would become science). Its presence is neither proven nor disproved. Acceptance of the verity of science is valueless, but its understanding esteemed. Understanding the supernatural is simple, and its acceptance as an act of faith honoured. Supernatural belief is again unique to humans.
- 13) The vastness of the universe never ceases to amaze. If God created the universe to test mankind why is there such a mind-boggling huge waste of space, an inexplicable cosmic overkill? Isn't there a disproportional relationship between the objective, the trial of mankind, and the inappropriate vastness of the universe as its stage? On closer inspection, this questioning itself is a source of amazement; it implies we consider ourselves justified to judge God's actions with human perspective and values. Do we have a comparable perspective to God? Should God act only in such a way that appeals to our senses? Can insects pass judgment on our actions and values, questioning why we should cover several percent of the earth's surface with concrete and asphalt? Also, why we cut down the world's forests to manufacture toilet paper, newspaper, and books? We share fifty per cent of DNA with worms, thus worms are as likely to understand our minds as we of God's. A suspicion might arise of the infinite power of God if the universe were the size of the solar system. The question would arise: why is the universe so small? Would we not then suspect there might be other greater gods beyond? How would they interact? It also implies there is an optimum size for the universe that would give it the most appeal to humans, smaller than the present, greater than the solar system. How big should this optimum size be and what are the criteria for suitability? In judging the size of the universe, our criteria of expended effort, energy, and time, which we use to measure every other worldly project, are not suitable. Nor can we see from God's perspective. Besides we aren't sure that we alone in the universe are subject to trials; the Scriptures explicitly say other life forms exist who are similarly involved.
- 14) Creation and evolution. An inherent precondition of the theory is that it can neither be proven nor disproved. Evidence of creation as the work of God must be neither provable nor disprovable. Thus the theory of evolution must appear to be viable; otherwise by default its refutation would prove the existence of a Creator; it would then be taught as historical fact and the cosmic battle would become extinct. It would also expose a flaw in the theory and would be very unfair for those who had lived before. The theory predicts that evidence proving or disproving creation by God will remain unattainable. By necessity it must appear that the universe could have come about by chance. Well intentioned

Christians should stop looking for proof; they will never find it. Conversely, atheists can never prove that Creation was not an act of God.

- 15) Historical events. Individuals and nations determine their own fate. Many historical events are related to actions of the group, some examples of which are given elsewhere in this book. Many historical events fit a pattern and can be interpreted in light of this theory. For instance consider in the last couple of decades: the Iraqi regime attacked Iran, a clear case of aggression against a fellow Muslim country. The Iraqis who willingly cooperated in the war share in the crime. Kuwait, which bankrolled Saddam, itself suffered, its rulers barely escaping with their lives. The Iraqis were collectively punished by sanctions, invasion, and lawlessness for backing and participation in aggression against other Muslims. In a remarkable reversal, the Americans attacked their former friend and protégé and destroyed the regime, without even a viable reason for it.
- 16) Everything else. The theory can explain everything else in its framework. Significantly, there is no other claimant for a "theory of everything" that is viable, coherent, and cannot be disproved. The major secular contender is physics, but even if a unified theory of everything were discovered today, physicists still have little idea what most of the universe is made of, or what is causing the universe to accelerate in its expansion, let alone the meaning of life, life after death, man's role on earth, its individual or collective fate, the nature of conscience, consciousness, good and evil, the nature of the soul, or its eternal destiny. Anyway as a rule, scientific explanation of the physical universe changes fundamentally every generation or so, and science is fundamentally incompatible with absolutes.

A summary of maxims from the Koran

- 1) All Muslims are brothers and sisters irrespective of race or colour; Unitarian Christians are stepbrothers, Jews and Christians cousins. All who worship one God are members of a family. Kinship through faith is elective and more relevant than race. Faith is chosen; race and colour are not. Humans exhibit differences in appearance and culture, but in God's view there are only two types: believers and non-believers, one faithful to its Covenant, the other not; one seeking the truth, virtuous, submissive, and self-less, the other believing only in this world and the pursuit of pleasure, restrained only by social and legal restrictions. The soul has no race or colour.
- 2) Tyranny and persecution.
- 28:02 Now Pharaoh made himself a tyrant in the land. He divided his people into castes, one group of which he persecuted, putting their sons to death and sparing their daughters. Truly he was an evildoer.

This and similar passages condemn tyranny and persecution. By implication they encourage governments to respect the rights of the individual as well as religious laws. The Koran gives little instruction about the mechanism for choosing a ruler

or government, but at the time, they had the most democratic process in the world. A new ruler was chosen by a large group of elders, each a representative of a community. They gathered specifically to evaluate the candidates, discuss their merits and suitability, then vote for the successor. This was changed by the 5th Caliph, who disposed of this system and instead adopted the Persian style of hereditary monarchy. Europeans believed in the divine right of hereditary monarchs for another millennium.

3) The imperative of justice

God loves the just.

There is a good example in Ali, the fourth Caliph, one of the most powerful men in the world, who was prosecuted by one of the weakest in the community, an old Jewish widow.

Ali's fairness, justice, and humility were based on Islamic law, in which great value is placed on justice. He practiced the Islamic precept that no one is above the law; a novel concept in the history of mankind.

The independence of the judiciary and supremacy of Islamic law are pillars of Islam, but the thousand year head start has been squandered. The independence of the judiciary prevailed in the early days of Islam, probably for the first time in history, but as Arabians absorbed Persian culture, the election of rulers by a council of representatives was replaced by hereditary absolute monarchy; an alien Arabian concept.

Ironically, by adopting Persian style powers, Mo'avieh, started the schism of Shi'ism, whose main proponents today are Iranians. (Incidentally, the independence of the judiciary and legislature was originally formulated in the West by Montesquieu, whose rise to fame was due to his book "Persian Letters." His concept had considerable influence on the French and American revolutions.)

4) Muslims cannot do as they please in matters of state.

Eternal values take precedence over temporal ones, unless the former can be proven not to exist, but since they can't, a framework of religious laws should be incorporated in the constitution, rather than outright democratic submission to the will of the majority. Otherwise abominable crimes today will inevitably become decriminalised and socially acceptable tomorrow (by historical precedence).

Absolute democracies have the dubious habit of discarding the accumulated wisdom of ancestors in a trifle. Clergy should be wary of politics, which can easily corrupt. They should exhort virtue with social pressure rather than punitive powers.

2:256 There shall be no compulsion in religion.

Without the restraining force of religion, there is only one direction morality can move, downwards. Absolute values serve as standards. A boat adrift in the ocean cannot determine speed or direction without fixed references.

Without absolutes, society drifts unwittingly with the prevailing current, wherever it leads. Moving away from the past is perceived as progress even though it may be in the wrong direction.

33:36 It is not for true believers, men and women, to take their choice in their affairs if God and His apostle decree otherwise.

The most suitable form of government is a democracy with an independent judiciary and a free press, but Islamic laws should be incorporated in the Constitution of Islamic countries.

These should be based solely on the Koran, not on local culture; such as forbidding women drivers and stoning adulterers which have nothing to do with Islam and a lot to do with patriarchal society.

In introducing democracy to Islamic countries, two adages by Thomas Jefferson apply. Firstly, freedom is not an innate human characteristic. It must first be bestowed; then after it is experienced and appreciated, it will be difficult to take back.

Secondly, dictatorship with a free press is preferable to a democracy with a muzzled press, because democracy without a free press reverts to dictatorship, while a free press will change a dictatorship into a democracy.

5) Muslims must obey the rules of the land.

04:59 Obey God, the Prophet, and those in authority among you.

Muslims must be law-abiding citizens in the land they live. The only exception is jihad, but this requires extraordinary circumstances, like the Soviet invasion of Afghanistan, the Serb massacres in Bosnia and Kosovo etc.

None of these apply to Muslims living freely in peace without discrimination so long as they can pursue their grievance through the judiciary.

This deprives them of the right to engage in illegal violent activity in such states. If denied these by the state, retribution is the right of any individual or group.

CHAPTER 11 PERSPECTIVE OF BELIEF

(God doesn't believe in atheists, therefore atheists don't exist.)

Weltanschauung

Believers develop a fundamentally different world perspective compared to non-believers. For one, death is the absolute end to all-precious life, for the other an interface between this fleeting life and an everlasting one. One despairs of life after death, the other aspires to it. For one the pleasures of this life are supreme, the other the next.

For non-believers, all values are relative. For believers, faith, piety, charity, humility, self restraint, and patience are absolute values that transcend this world to the next. The difference in perspective will persist until life after death can be scientifically refuted; which it can't.

Faith is risk-free, but its absence incurs potentially infinite loss. Contingent consideration is judicious and wise. Dismissing it without good reason and basing this most crucial decision merely on emotions is incredibly reckless and stupid.

A celestial enigma: when life reaches a threshold of intelligence, does the notion of God develop spontaneously? Is awareness of the supernatural a chance development?

Despite the inherent indeterminate nature, resolution of the enigma is not impossible. Evaluation of circumstantial evidence gives a fair estimate of the probabilities. Cosmic and terrestrial fine-tuning, coherence of the theory, compatibility of Scriptural claims with actual evidence all shift the probability substantially towards deliberate design.

If only a single species from tens of millions is confronted by the issue, the probability further shifts towards deliberate design. If numerous life forms are involved, the probability shifts towards spontaneous development, as would major flaws in the Scriptures.

Consider the four main classes of beings:

- Inanimate objects that passively react to physics forces acting on them.
- Mindless life forms such as vegetation and microbes that actively react automatically to their environment through sensors, rather than a central processor.

- Animals with varying degrees of awareness of their surroundings, which use the brain to react to stimuli.
- Life forms with consciousness, awareness of spirituality, with refined abstract thought.

The celestial enigma concerns only a single species from millions. If spiritual awareness developed spontaneously, other species must also have developed it, and eventually others must do so. Evolution prescribes a general increase in intelligence; for some species it will eventually pass a critical threshold, where deep consciousness and spiritual awareness should develop.

If deep consciousness is spontaneous, the principle criterion for its development is intelligence. Computers exceeding a critical level of intelligence should acquire it also (they will soon surpass human intelligence).

The same applies to spiritual awareness. Since computers lack the irrational stubbornness and cultural prejudice of humans, they will inevitably accept the probability of the existence of God (even though there is no computer Heaven or Hell).

Life forms with intelligence below this threshold lack sufficient consciousness to be held responsible, thus are unsuitable to be resurrected and held accountable. Justice would only allow it for life forms that understand the conditions with freedom to choose.

Any life form that understands the concept should be concerned unless it can be absolutely sure it has stumbled across this state of awareness by chance.

An interesting quality of this enigma is that its degree of uncertainty fits perfectly with the indeterminacy principle of the trial.

Of the four classes, humans appear to be the only ones with free will, but despite their intelligence they are also the least rational. All animal action is rational; directed strictly towards survival, adaptation, and procreation. Animals have less intelligence, but are more rational, which is a paradox.

Another paradox is that human irrationality only applies to spiritual matters. If humans were totally rational, the trial would be compromised, thus the necessity for the intensity and variety of emotions, temptations, and entertaining pastimes, unique to humans.

Inanimate objects behave totally predictably, unable to do anything but react to forces acting on them, governed only by the laws of physics. Vegetation and animals direct every action for propagation of life. Humans are the exception; not only are these not directed solely towards evolutionary progress, but often oppose it

Sceptics of free will often refer to a documented case of a man in Virginia, who with no criminal history abruptly became a child molester and porn addict after developing a brain tumour. After its surgical removal, his deviant behaviour

disappeared and he became his normal self again. The case is used to support the notion that free will does not exist.

The fallacy in the deduction is that the tumour forces involuntary deviant behaviour, similar to the way an electric shock causes involuntary muscle movement, but it doesn't. The tumour doesn't force deviant behaviour, but encourages it. Despite the strong temptation, he could have refrained; especially if he felt painful punishment was inevitable. (He had molested his step-daughter, a common crime rarely prosecuted and which many get away with.) The tumour played the role of tempting him by increasing the desire for certain action, a feature prescribed by the theory to afflict everyone without fail.

Summary Issues

In answer to whether we reached this threshold by chance or have been led to it by the Creator, circumstantial evidence presented here suggests deliberate design.

The most rational case presented against it is Tobin's treatise: "Rejection of Pascal's Wager." Christians and Jews are naturally offended by the intense criticism of the Scriptures by Tobin and should avoid such texts, because it's this sensitivity that protects their faith. They have sufficient spiritual feedback from God. Whether the Bible is inerrant is a technicality that is less important than the force they feel.

Tragically, millions of Christians and Jews are put off by numerous flaws and contradictions in the Scriptures. In the scientific age, they expect and demand a more rational basis for belief and cannot reconcile the faults, even though it is stipulated by Indeterminacy.

"Rejection of Pascal's Wager" attacks the Bible with hundreds of broadsides, a fraction of which would sink any other creed. The fact that Christianity is growing in strength despite this is miraculous; suggesting its sustaining driving force is independent of quibbles with the wording of the text. Much of Tobin's blows would flitter away if claims to inerrancy of the Bible were dropped, especially since the existence of faults and flaws are perfectly compatible with the theory, in fact demanded by Indeterminacy.

A poll by Time magazine says ninety-four percent of Americans believe in God, while many of the remaining six percent believe in a supernatural power; one wonders what atheists make of that. Do they consider Americans, leaders in science and engineering, as irrational, gullible, weak-minded bigots?

The same poll says that the majority of Americans don't know who delivered the Sermon on the Mount, suggesting their faith isn't based on a detailed study of the wording of the Bible, nor historical details, but rather on a resonating, live, subliminal, supernatural quality, which most of mankind experiences directly and independently in one way or another.

Science has not in the past, and cannot in the future make definite pronouncements on the issue. Each must look to its own facilities of wisdom, deep consciousness, conscience, and remnant awareness of the Primal Covenant gnawing at the psyche, an indefinable twilight awareness of the soul, and recognition of patterns in events.

Some may say spiritual awareness is a culturally derived meme. If so, in the myriad cultures in the world, one should readily find many that are devoid of any form of religion or belief in the supernatural. Its universal distribution from prehistoric times suggests neither a cultural basis nor chance occurrence. In the Stone Age, despite humanity's precarious existence, it expended substantial amounts of its limited resources on spiritual matters; no sign of which has occurred in any other species.

Some speculate Neanderthals also had spiritual awareness, yet how strange and convenient that they all mysteriously died out; another amazing and very convenient coincidence.

Yet another astonishing coincidence, necessary for our theory, is that they never interbred with humans, alongside whom they lived for tens of thousands of years.

Many attempts to forcibly eliminate spirituality and religion have failed. Soviet atheism was followed by a groundswell resurgence of religion, despite their utmost effort to annihilate it.

Animals appear totally unaware of spirituality even though their physical senses are more developed and advanced than humans; they sense with ultrasound (bats), very low frequency sound (elephants and whales), ultraviolet (insects), infrared (snakes), magnetism (pigeons), and electric fields (sharks and rays), none of which humans possess. Pigeons also navigate using the orientation of the stars and internal clocks. Many species accurately monitor the phases of the moon, including corals that have no brains.

Scientists have spent much effort in vain to locate the source of consciousness; no single location accounts for it. The secular view is that humans developed this through increased intelligence, but if so, a correlation between intelligence and spiritual awareness should exist. All humans have it, all animals don't. The relationship is abrupt and discontinuous, extremely rare in nature. Tens of millions of species lack it though we share 99% of genes with mice and 98% of DNA with chimpanzees.

Humans of low and high intelligence are randomly religious or atheist; faith is not a function of intelligence.

Others say our innate awareness is genetically based, accounting for its universal distribution. This implies that some day the relevant genes can be determined and modified, rendering the individual involuntarily incapable of experiencing religious feelings and eliminating awareness of spirituality. These genes might then be transferred to apes say, which would make them religious. This theory

predicts it will never happen, even though the technology is available today (in the 1990s, fluorescing genes from fireflies were transferred to amphibians and mammals).

Genetically the closest animal to humans is the chimpanzee, but the more distant orang-utan has a more sophisticated consciousness. Only few primates and Giant Pacific Octopi are aware of their reflection in the mirror; all others consider their reflection as other entities. (The mirror test is one of the few ways available to gauge the degree of consciousness of animals).

Considering the undeniable benefits deep consciousness has had for humans, it's odd that Nature should have stopped its development for animals despite hundreds of millions of years of opportunity, but lavished it copiously only on humans.

Mitochondrial DNA, (inherited solely from the mother), shows conclusively all humanity is descended from a tiny group of about 150 people who lived about seventy thousand years ago. Astonishingly every other human spread across the world mysteriously died out, which is amazingly convenient for our theory. (The notion that had this tiny group not survived, no one in the Universe would have developed cosmic awareness is a source of awe for atheists.)

Cosmic background radiation shows the Universe was created from a big bang, in extraordinary agreement with the Scriptures. It could so easily have been otherwise, in which case fundamental precepts of the Scriptures would have become refutable. These, together with mind boggling tens of orders of magnitude coincidences for cosmic and terrestrial fine tuning, the chance development of DNA and reproductive life, as well as remarkable coherence of the theory, push the probabilities considerably towards deliberate design.

Without convincing rational counter argument, ignoring the implication is truly perverse.

51:55 Admonish true believers; admonishment will help them.

50;45 Admonish with this Koran whoever fears my warning.

The rationale presented is to assist the individual make a logical decision on this important subject. Allowing religious or racial prejudice to influence the decision is the ultimate folly; forfeiting eternal life for the sake of values that do not exist in the next life. All are warned some way or another. The stakes could not be higher.

47:36 The life of this world is but a sport and a pastime.

Primary features in faith are submission to God's will, self restraint, subjugation of worldly desires, and acknowledgement of the fleeting nature of this life as a subsidiary to the next. Advantages are that afflictions are less depressing, the calamity of death less awful, and a happier outlook on life is easier to attain. Many polls show believers of most faiths are generally happier than non-believers.

Believers find contentment with less, and can make peace with the world on easier terms; whereas unbelievers tend to feel greater disappointment with failures and are more troubled by worldly losses. A secular outlook on life can be dismal. (Pascal said Western man cannot find peace in an empty room).

The Philosophy of Jihad

9:111 God has purchased of the faithful their lives and worldly goods and in return has promised them the Garden. They shall fight for His cause, slay, and be slain. Such is the true pledge, which He has made them in the Torah, the Gospel and the Koran. And who is more true to his promise than God? Rejoice then in the bargain you have made. That is the supreme triumph.

Martyrs derive strength and inspiration from this. They enter battle not with the urge to kill, but with a resignation to die; decided beforehand in the quiet of their meditations and in the framework of this covenant. The supreme test for a believer is the ultimate sacrifice: this life for the next.

09:41 Whether unarmed or well equipped, march on and fight for the cause of God, with your wealth and your persons. That will be best for you if you but knew it.

There isn't much point in entering battle against a well-armed foe if unarmed, especially if the object is killing or defeating the enemy. This demonstrates that jihad mainly involves putting one's own life in danger for the sake of God, rather than killing the enemy. This is the essence of jihad, the re-enactment of Abraham's test of faith and ultimate sacrifice.

Abraham, extremely old and not far from death, felt the life of his only son, for whom he had yearned so long, was more precious than his own, thus his test also was the supreme sacrifice, because he was sacrificing his most precious possession: the life of his only son, which he valued more than his own. Only the father of a beloved only son can imagine the immense torment he must have gone through.

If he didn't believe in God's power over life and death, he wouldn't have proceeded.

The Mujahedin too forsakes his most precious possession, his life for the sake of God. He proceeds to the place of sacrifice, the battle front, to present his life in a confirmation of the power of God over life and death and in submission to the will of the Creator of the Universe. If he dies there, he has exchanged some dubious years of this life for eternity in the next.

A secondary objective is to right a wrong, defend Muslims, and strengthen the faith. Is there a nobler sacrifice?

29:05 He that fights for God's cause fights for himself. God does not need his creatures' help.

14:03 Woe to those who love this life more than the world to come.

Mujahedin approach the battle not in rage, nor with any urge to kill, but in calm submission. Peace with God has already been made during the solitude of meditation; a peace that overcomes the natural fear of death.

The significant distinction is the resolution to sacrifice their lives if necessary rather than to kill.

No need for bayonet practice to instil a killing spirit. They have made peace with God in a momentous covenant to exchange this life for the next, the ultimate test of faith. They act out in the field of battle what they have determined beforehand during tranquil meditation.

The unbeliever is appalled by death, but the Mujahedin sees this as a noble sacrifice, a portal to eternal life, recognition of the power of the God over life and death, a commitment to his covenant with his Creator, before he can become corrupted by worldly pleasures.

The most serene individuals I have seen were Mujahedin on the front lines. Heedless of physical discomforts, they appeared blessed with "sakineh" or the "peace that passeth all understanding", evident in their beatific expression and amazingly peaceful demeanour, in contrast with the tremendous stress one would expect them to have. Resigned to imminent death, they took solace from prayer, meditation, and the Koran. Compare this with American war veterans in the Gulf wars, Iraq, and Afghanistan who suffer psychological damage years after returning home, many ending with suicide.

When death is close, behind the turning in the mountain pass or lurking over the crest of a hill, the believer develops a powerful sense of spiritual proximity to God. Instead of fear, nervousness, or stress, he senses the closeness of God, a surreal comforting reassurance that is gratifyingly greater than the fear of death.

The spirituality isn't diminished by tenacious companions of war: danger, hunger, cold, lack of sleep, and relentless physical discomfort; if anything, enhanced by them.

More religious development has occurred in barren deserts of the Middle East than in lush forests. Jesus fasted forty days in the desert wilderness to attain a suitable state of spirituality, and the Holy Prophet frequently retreated for meditation to a mountain cave.

Abandoning the clamour of materialism enhances spirituality.

What spiritual enrichment has emanated from wealthy sybarites? Asceticism is the basis of Christian and Buddhist monks, friars, Dervishes, Sufis, and Jainists.

Perhaps materialist and spiritual emotions have a fixed sum; reducing one increases the other.

Mujahedin who survive are unlikely to experience the feelings again: deep serenity, counter-pointed with physical discomfort and closeness to death. These quickly dissipate in physical comfort and security, are diluted by modern conveniences, and swamped in the hectic struggle for material acquisition.

04:74 Let those who would exchange the life of this world for the hereafter, fight for the cause of God; whether they die or conquer, We shall richly reward them.

3:145 No one dies unless God permits. The term of every life is fixed.

A palliative for dithering believers is that the term of every life is fixed. When the time's up, whether tucked in bed at home or at the front makes no difference.

Proof for this is of course impossible; but some anecdotal evidence supports it. A close acquaintance volunteered three times for jihad; in one he was armed solely with a revolver and several sticks of dynamite for use against Soviet tanks (by lighting the fuses with matches in the heat of battle, then throwing them onto the tanks; even if any had landed on a tank, it would hardly tickle the armour.)

Despite reckless antics, he came back in better health than before, but within a few days of each return, a close relative of his unexpectedly died; all three in their thirties or early forties. The barely armed Mujahedin had taken on a powerful well equipped army, and despite extreme recklessness, came back in better health than before (his chronic allergies completely were cured either by the clean air at the front or the insect bite therapy reluctantly received every night from numerous painful horsefly stings).

Returning each time, a close family member in apparently perfect health died suddenly and unexpectedly; pure coincidence three times in a row? Maybe, maybe not; an eternal destiny depends on such.

The Basis for Self-restraint

64:17 Those that preserve themselves from their own greed shall surely prosper.

42:36 That which you have been given is but the fleeting comfort of this life. Better and more enduring is God's reward to those who believe and put their trust in Him; who avoid gross sins and indecencies and, when angered are willing to forgive; who obey their Lord, attend to their prayers, and conduct their affairs by mutual consent; who bestow in alms a part of which We have given them and, when oppressed, seek to redress their wrongs.

The verse presents the believer's outlook on life. Comforts of this life are fleeting compared to those of the next. This is easily forgotten due to the physical proximity of one and the indefinite distance of the other. It advises submission, trust in God, curbing anger, forgiveness, prayer, and charity, all of which oppose natural inclinations.

It all fits perfectly with the trial nature of life. Why is mankind alone aware of morality? Nature distributes features among species only in small gradual increments because genes mutate slowly. Why is there no gradation of it among animals? No other species so utterly unique and profoundly different from every other.

Strangely we are the only species to override evolutionary imperatives developed over millions of years; replaced by ethereal spiritual values of no evolutionary benefit.

We recognise the nobleness of suppressing anger, envy, and hatred and replacing them with compassion, forgiveness, and charity; unique qualities among all life forms. The natural tendency is the opposite.

Altruism is also observed in animals, but it serves an evolutionary purpose: the preservation of sibling genes. Human charity is different. If it were related to gene preservation, charity would be directed only towards kin. Charity and forgiveness are derived not through pragmatism, but from morality, conscience, compassion and the appreciation of the nobleness of virtue, alien concepts to animals.

At a loss to explain this, some scientists resort to the concept of cultural genes or memes: a virtual equivalent of genes, existing only in the mind. Like genes, memes mutate, enhancing their prospect for survival and propagation (this concept by Dawkins is widely accepted but still unproven).

It may explain the mechanism of transfer and development of ideas, but it doesn't explain our unique nature, whereas this theory does; based on the trial nature of life, the free will deliberately bestowed for the purpose, and the unique human ability to override genetic instincts. The fit with the trial nature is perfect.

Spiritual values have dubious evolutionary benefit: prayer, patience, charity, forgiveness, love, and compassion. Memes must serve a purpose, but what are they? What is the benefit of prayer? If it is to give peace of mind, other species should have also developed it after eons of evolution. Animals certainly need it more than us; their extremely stressful lives demand it. From the instant of birth, they suffer from lack of safety, security, shelter, or sustenance; constantly threatened with violent death or starvation.

By the way, insistence of the verse on "conducting affairs by mutual consent" stipulates the importance of democratic values at the elementary level, which by implication advocates democratic values at the macro level also.

31:13 Luqman admonished his son. "My son," he said, "serve no other god instead of God, for idolatry is an abominable sin. ... my son be steadfast in prayer, enjoin justice, and forbid evil. Endure with fortitude whatever befalls you. That is a duty incumbent on all. Do not treat men with scorn, nor walk proudly on the earth: Allah does not love the arrogant and vainglorious. Rather let your gait be modest and your voice low: the harshest of voices is the braying of the ass."

It's hard to improve on Luqman's advice, encouraging piety, justice, fortitude, patience, and the most precious commodity of all: humility. These aren't genetically induced or the outcome of social heritage, but the result of an internal struggle against the ego; alluring vices countered by wisdom and faith.

In a further tribute to Luqman's accuracy of observation, despite the discovery of millions of new species, the braying of the donkey is still the harshest of voices.

42:44 To endure with fortitude and to forgive is a duty incumbent on all.

57:23 Every misfortune that befalls the earth, or your persons, is ordained before we bring it into being. That is easy for God; so that you may not grieve for the good things you miss or be overjoyed at what you gain.

We must set aside some of our much loved and hard earned wealth as alms against natural reluctance.

Everyone is afflicted with misfortunes; those with little faith will find them harder to bear. Those who appreciate the fleeting nature of this life and the eternity of the next can better reconcile with them.

Misfortunes are not unlucky events to be grieved over, but pre-ordained tests. They occur for a reason, are party of the trial, and must be endured with fortitude.

On what basis do people expect perfect happiness in this life followed automatically with eternal bliss in the next? Has anyone had a perfectly blissful life from birth to death? How preposterous to expect to be the first.

The verse admonishes reducing the grief of misfortunes and also the pleasures from chance gains. It encourages less attachment to the material world. Such an approach will reduce emotional fluctuations. The preferred recommended demeanour is a cool mien, to damp the emotional troughs and crests of life's inevitable sorrows and joys. Lessening the difference between the ecstatic highs and depressing lows is psychologically healthier and more stable. (It's also much healthier for spouses and relatives).

Love and Marriage

A pervasive notion in Western culture is that the noblest emotion is love, derived from Jesus' exhortation of love-thy-neighbour; also it's hard to fault love. But its modern implementation has developed a marked physical component. One could be forgiven for confusing it with lust, usually felt for the young, healthy, and pretty. These are based on evolutionary animal instincts and are *not* what Jesus meant.

An essential component of the love enjoined in the Scriptures, distinguishing it from lust, is its selfless nature, devoid of physical attraction.

Platonic love appears similar but is definitely not the same. Even though little or no physical attraction is involved, it occurs *involuntarily* towards charismatic individuals, whereas virtuous love is not impetuous but requires conscious development, a product of piety and charity. The objects of such love are the weak, ugly, and poor; not soul mates, the attractive, young and colourful characters. It derives from piety and charity instead of physical gratification. In its ultimate form, it really does induce to turn the other cheek.

The Islamic view of physical love is different from that in the West. Love is not regarded as a necessary prerequisite to marriage. It has been scientifically shown that being in love is a mild form of insanity and causes temporary blindness. The afflicted party thinks it has exceptional clarity of vision and discernment, whereas as in drunkenness the opposite applies.

In choosing a spouse, the temporary blindness clouds long-term compliancy, burdening the young and inexperienced mind with even more complication in an already complicated process, a confusing concoction of hormonal imperatives and social and cultural coercion.

It explains the propensity in Islamic culture for arranged marriages; the parents' views are not distorted by intoxicating forces of physical attraction. They see what their children will see only years later, when the magnetic compulsion of love has lifted, often too late.

Love is not considered a serendipitous attraction between twin souls, but a bond built up gradually in a virtuous process of directed effort, self control, mutual respect, flexibility, and compliance.

The process is badly exacerbated in the West where the unrealistic expectation of perfect mutual love prevails. Love reaches its zenith before marriage after which it can only go downwards, subconsciously inducing negative connotations on the institution of marriage. But in Islamic and Eastern cultures, starting from a lower state of romantic expectation, love and affection increase after marriage, subconsciously strengthening the bond and sanctity of matrimony.

The cohesive force binding the family unit is weaker in Western culture. Islamic and Sharia laws are directed towards strengthening the family unit; anything that weakens it is forbidden. Mixed social gatherings, intimacy between opposite sexes outside marriage, and public nudity facilitate infidelity by diminishing the physical threshold for it. Weakening family bonds is perfectly fair game for any commercial enterprise in the West.

64:14 Believers, you have an enemy in your wives and children: beware of them. But if you overlook their offences and forgive and pardon them, then know that God is forgiving and merciful.

Husbands and fathers appreciate this from experience, but it's best to understand this before marriage and parenthood. Though strong forces bind the family, underestimating the forces acting against them can cause terminal damage. The family is a source of joy and comfort as well as grief. In the warning above, the verse advises caution in forming a family unit to discourage unrealistic expectations.

Key attributes required are forgiveness and reduced expectations. A forgiving and tolerant attitude minimises friction, while reduced expectations diminishes disappointment.

24:31 Enjoin believing women to turn their eyes away from temptation and to preserve their chastity; to cover their adornments (except such as are normally displayed); to draw their veil over their bosoms and not to reveal their finery except to their husbands.

This describes chaste attire; decent without drawing attention, as implied in "normally displayed." Ninja type hijab is not suitable in the West as it draws unwanted attention and is not normal. The "chador", "burkah" and full facial veils, though perfectly decent, reflect patriarchal rather than Islamic culture.

Men of the Touareg in Morocco cover their faces, but women don't.

Family and Friends

09:22 Believers, do not befriend your fathers or your brothers if they choose unbelief in preference to faith. Wrongdoers are those who befriend them.

This appears a strange commandment encouraging dissent in the family (though not disrespect). All Islamic regulations are directed towards strengthening the family unit, but reserve is advised here because it's easier to be led astray by a relative than a stranger. The fact that family ties don't exist in the next life gives further justification, as does the enormity of the stakes.

One should remember the importance of the spiritual trial, for which life was created. Fraternal and paternal bonds are fairly insignificant in comparison. We are not created by parents but by God.

Besides, everyone has already sworn to the Primal Covenant at some time in the past, thus is destined to come into this world anyway.

60: 08 God does not forbid you to be kind and equitable to those who have neither made war on your religion nor driven you from your homes. God loves the equitable.

Believers are brothers and sisters with one another. They are advised against befriending unbelievers in preference to believers, to minimise the potential influence to be led astray by them. Nevertheless, they are urged to be kind and equitable to all, including unbelievers as a religious obligation.

The only condition for not showing kindness to unbelievers is that they should either have made war on their religion or driven them from their homes.

4:114 There is no virtue in much of their counsels: only in his who enjoins charity, kindness, and peace among men. He that does this to please God shall be richly rewarded.

There is much debate over how believers should treat others, nationals towards foreigners, immigrants towards hosts, etc. Some preach violence and hate, but the most virtuous counsels are those that enjoin charity, kindness, and peace among men. Best of all are those who do this, not for political or social expediency, but to please God.

Conventional Wisdom

10:07 Those who deny they will ever come before Us, delighting in the life of this world and contenting themselves with it, and those who give no heed to Our revelations, shall be cast into Hell and punished for their misdeeds.

A fatally wrong conventional wisdom is that if someone with little or no faith avoids crimes and gross sins, it is basically OK with little to worry about, especially if an occasional prayer is proffered. Hell is only for horrible criminals and murderers.

There is no basis for this, which is pure conjecture and probably will be the greatest source of grief for mankind.

Unbelievers are doomed even if society's most respected citizens, who have never broken laws or wronged anyone. Secular values are so ingrained that many find such notions hard to accept.

One must appreciate that celestial laws are not based on human values, nor designed to appeal to our taste, which changes substantially every generation anyway. Everlasting values of the Creator of the universe take precedence.

It is we, who have to adapt to God's values. This is what life is all about. We are not in a position to judge His eternal values with those currently in fashion. Whether we accept them or not, or find them appealing or not, has little effect on their verity. The reality of Hell is independent of our belief in it.

We are mistaken to think physical crimes are less than the ethereal denial of God, even though the denial is personal and doesn't affect anyone else. In the West, denial of God has been relegated from its position of many centuries as an abhorrent sin to its recent state of irrelevance, because it doesn't affect others.

Peace and respect for fellow men are top prevailing values, but it has only become so in the last few decades. Colonialism encouraged the total exploitation of the subdued nation. Apartheid in the US and South Africa has only very recently been dismantled, more to avoid the threat of social backlash than from pious benevolence. Many still resent it.

Till recently racial segregation was considered perfectly acceptable, many Americans fought and died for it. It's still enforced in Israel where it is strongly condoned by the West.

Up till recently nationalism reigned supreme; wars over it caused the slaughter of millions. Any country was fair game for invasion and subjugation by European Imperialism.

This was preceded by religious wars and Crusades. Future wars may be over water, oil, or minerals. The values of one generation appear alien or abhorrent to others. Human values vary dramatically every generation and cannot be trusted to evaluate eternal absolute principles on a cosmic scale.

Faith isn't a matter of trivial private pursuit of no consequence, as considered in the practical minded West since it has little *physical* ramification, but a great undertaking in acknowledgment of the greatest force in the universe.

Faith is based on:

- 1) Deep consciousness and conscience, unique to humans, a remnant of the Primal Covenant, inexplicable otherwise.
- 2) Substantial coherence of the theory derived from the Scriptures.
- 3) Considerable cogency from abundant circumstantial evidence.
 - 4) Spiritual awareness, again unique to humans; an essential requisite for the trial.
 - 5) Actual feedback, manifest in various guises; recognition of an overall pattern in events.

No other firm coherent explanation exists for the existence of deep consciousness, conscience, or our unique spiritual awareness and obsession of the supernatural.

The Bible is too substantial to be dismissed as merely a collection of old stories. The description of Creation is too amazingly accurate to have been a consecutive series of wild guesses.

The philosophy of Jesus is too resonating with our sense of virtuous values and his ministry too unrewarding for him it to have been driven by worldly interests.

The Koran is too potent in coherence, lack of contradictions, and eloquence. After fourteen centuries, its compatibility with evidence for numerous assertions, which could not have been known at the time, is too remarkable. Its lack of flaws is unprecedented for any other scripture or religious philosophy.

Especially amazing is that its transcriber was neither literate nor educated; its literary excellence is unequalled before or since in the language of its revelation. Of special significance is the absolute dearth of literature in Arabic before the Koran. A great work of literature cannot emanate spontaneously out of nothing, but is invariably influenced by much preceding it. All these give compelling cogency.

There is an amazing series of extraordinary coincidences that all combine to make the theory remarkably viable; especially considering the internal limitation of Indeterminacy.

Faith does not derive from emotional whim, but is based on ethereal recognition of our primal past, awareness of spirituality, our unique status among other life forms, and reflection on the substantial circumstantial evidence, some of which is presented in this book.

How coincidental that the theory fits perfectly with abundant evidence supporting it, though of course never conclusively. The amazing probabilities and

coincidences cannot be lightly dismissed. The inability of science to disprove them is truly amazing. Despite great advance in scientific knowledge, no evidence has been found to disprove the basic precepts of theistic or Islamic philosophy.

DNA analyses have shown that all humans are astonishingly closely related, despite great physical dissimilarity. Genetic variation between all humanity is less than among a random group of about forty chimpanzees; a truly astounding and unlikely evolutionary development. It supports a cornerstone of faith: the special, unique position of mankind.

Of the humans dispersed all over the world tens of thousand years ago, only a tiny group survived; the group that crossed from the Horn of Africa to the Arabian Peninsula. Every other human died.

Even in a nuclear holocaust, numerous pockets of humanity would survive all over the world, and any that got through a year or so of nuclear winter would survive, adapt, and develop independently. Considering their hunter gatherer expertise, they would be much better suited to survive such catastrophes than modern civilization-dependent humans.

For human mitochondrial DNA to have become so uniform, two alternatives exist: either these 150 people were living insularly together for about two hundred years while every other human and Neanderthal mysteriously died, or this group of 150 were descended from common parents, the perfect Adam and Eve scenario. The directness of the evidence and the degree of scientific compatibility is astounding.

Nature has bent over backwards and gone to extraordinary lengths to make the Adam and Eve scenario a distinct viable possibility (remember conclusive proof is prohibited). The probability of human development to have occurred the way it did is extremely low.

The twenty four or so claims in the Koran and more in the Bible, which can be scientifically evaluated, withstand scientific scrutiny remarkably well. Are they all coincidences? So many coincidences in any other subject would induce extreme suspicion something was behind it, but here all these are ignored

Basic components and the framework of the theory and dozens of its claims cannot be disproved, which is totally unlike any other theory or philosophy, even in the last few centuries, let alone fourteen.

If the correct probability for each claim is 50%, the probability for 24 correct guesses is one to 2exp24, (one in sixteen million), a significant result by any measure. Since the probability of a correct guess for most of the claims is less than 50%, the figure is much greater.

This is spectacularly inconsistent with the millions of human claims, assertions, and theories throughout history, the vast majority of which have proven totally false, mostly ridiculous.

Even in the modern era, many scientific theories, based on physical evidence, turn out to be wrong. Basic theories in cosmology appear to be overturned every decade.

Faith is not based on evaluation of statistics or cultural pride. Islam discourages national, racial or ethnic divisions. The single greatest impediment to faith and the most insidious of the deadly sins is pride. The philosophy would be flawed if humility were an impediment to faith. Without humility one cannot attain the selfless state required to evaluate ethereal truths. Truth is independent of our opinion on it, yet we persist in tangling it with personal emotions into impossible knots.

Health food diet

What on earth has a health food diet got to do with this theory?

Both are controversial subjects, backed by circumstantial evidence, both of fundamental personal importance, yet both difficult to quantify or prove. One concerns spiritual health, and the other physical health. Both involve a mixture of rationality, physical evidence, personal opinion, emotion, experience, and faith. Both are confusing to many and are clouded by cultural and personal prejudice. In seeking truth where evidence is lacking, both are in a similar situation.

In the controversy over healthy food, the wholefood diet moved from the fanatical fringe, where it languished for decades, into the mainstream during the 1970s. Initially there wasn't much scientific evidence to decide the case either way; similar to the religious controversy today: plenty of dogma, cultural bias, misconceptions, personal experience, conviction, and little hard evidence. Up to the 1970s most doctors dismissed it as a baseless fad of eccentrics.

The wholefood diet prescribed fresh fruit, vegetables, dairy, nuts, and wholemeal unrefined grain products. It prohibited processed and refined foods, chemical additives, white sugar and white flour. Their damage on health is common knowledge today, but it was far from obvious then. Up till the 1960s, processed and packaged foods were considered advanced, modern, and hygienic, another manifestation of industrial progress. Only in the last few decades has the realisation developed that natural products are better than factory processed ones.

In 1962 Rachel Carson's "Silent Spring" exposed the insidious effects of pollution, kick-starting the environmental movement, which till then was surprisingly silent. This too was initially viewed as fringe uttering from eccentrics. (If a bearded hillbilly naturalist hadn't got hold of Theodore Roosevelt's ear, the remaining 500 year old redwood forests in California would have been destroyed forever).

The wholefood diet encouraged raw fruit and vegetables, because these are the natural foods the body has adapted to over eons. Heating kills natural enzymes and processing reduces vitamins.

Chemicals are added to processed foods for appearance and longevity, even though it's known they are health hazards. Practically everything in the supermarkets in the 1960s and a lot today include them.

High fructose corn syrup is almost singlehandedly responsible for the obesity epidemic.

How did the philosophy develop without the evidence available today? Where did its proponents derive their conviction? They got it from the coherence of the theory. The premise was that the human constitution developed over tens of thousands of years on natural foods. Only since the Industrial Revolution has factory foods appeared.

Priorities in their manufacture are economics and convenience, not nutrition or health. Only regulations have limited the amount of chemicals added. If left to the discretion and trust of manufacturers, most of humanity would be ill. Though benefits of the diet are obvious now, in the 1950s and 1960s adherents to this philosophy were considered cranks. Their courage and foresight has increased the health and quality of life for millions.

Several factors played a crucial role in evaluating the viability of the theory. Firstly, its proponents actively sought to know the truth, whereas the vast majority sheepishly followed conventional wisdom that sugary foods were nutritious and smoking socially agreeable. Secondly, they were ready to reject cultural prejudice and willing to consider a new theory in light of its merit. Thirdly, they evaluated the validity directly from personal experience.

A scourge of the Industrial Age has been the pervasive use of white sugar, white flour, and trans fats (hydrogenated vegetable oils). In the industrial refining of wheat, the bran and endosperm or wheat germ containing most of the vitamins and minerals, are removed and used as cattle feed. The nutritious endosperm is taken out solely for the convenience of processors and distributors because it spoils quickly in air, making it inconvenient to store. The bran is taken out for cosmetic purposes and processing convenience. Unfortunately human digestion doesn't appreciate these and reacts inconveniently.

Wholemeal bread looks coarse and rustic. It was considered less attractive than white bread, pastries and cakes made from refined white flour. These were considered sophisticated and modern, even though they are now proven as unhealthy and have high glycemic index (the rate food is converted to glucose).

Low fibre in the diet increases residence time in the intestines causing complications of constipation, irritable bowel syndrome, and colon cancer. (In the early 20th Century, constipation was called the American disease. Kellogg made his fortune by curing this with high bran cereal All-Bran, introduce in 1915.) A high fibre diet absorbs toxins and causes these to pass more rapidly through the intestines because fibre is indigestible, absorbent, and in water expands in volume.

White flour keeps for years in storage without refrigeration, but the nutrient rich endosperm turns rancid in days. This produces considerable logistical problems for storage and distribution. Convenience takes precedence over nutrition in the industrial age.

In countries with subsidised bread, governments are compelled to distribute flour instead of grain. If they didn't, the subsidised grain would be resold to the government at the higher price. If wholemeal flour is distributed, it will spoil in days.

Fresh fruits and vegetables are a great source of vitamins, minerals, antioxidants, fibre, and enzymes. For thousands of years, they have been man's source for these. Vitamins and antioxidants are produced by fruits and vegetables for the protection of their own cells, but human cells utilise the same nutrients and antioxidants (human and vegetable cells share 40% DNA). When refined or processed, much of these are lost (except minerals). Chemicals added for appearance, colour, and preservation are often health hazards and allergens.

Though meat is a fair source of protein, not only do they lack anti-oxidants, they are a source of toxins and precursors of free radicals, which need to be neutralised by anti-oxidants.

In the last century, the human constitution was suddenly confronted with foods for which it wasn't adapted. The worst of these is refined white sugar (not counting chemical additives), which itself can be described as a chemical.

Processed food manufacturers are very fond of it; it's cheap, stores for decades, can be added to most foods, and is addictive. It is a major factor in obesity, diabetes, and tooth decay. It is totally devoid of proteins, vitamins, oils, minerals, antioxidants, or beneficial trace chemicals, but abounds in calories.

It has the highest glycemic index, rapidly raising blood glucose. The body is not adapted to deal with sugar surges and the ability to compensate accurately with insulin decreases with age. The body is adapted only for gradual blood sugar change, as happens with natural unprocessed foods. A spike in blood sugar is often followed by over production of insulin.

The resulting unnatural fluctuations in blood glucose put unnecessary stress on the body. Over-compensation of insulin leads to troughs in sugar levels, which induces false appetite and craving for more sugary foods. The vicious circle leads to sugar addiction, overeating, and obesity.

Most of this wasn't known in the 1960s. Wholefood proponents derived their conviction from coherence of the theory and personal experience. They also had a better than average intuition in recognising the truth and were less affected by cultural prejudices. Implementing the diet and feeling its benefits left little doubt. Many today owe their health to such pioneers. The similarity to religious controversy is notable.

Levels of Health

An intriguing question at the time was how was it that these eccentrics knew about these things while doctors, the medical establishment, and the scientific community didn't. The proponents were truly stumped for an answer. They couldn't say they knew better than doctors and scientists, (who had just sent a man to the moon), but they knew they were right. Remember that in the early 1960s smoking was still perfectly acceptable, even socially desirable. A healthy diet included plenty of meat, animal fats, trans-fats margarine, white bread, and sugary puddings. Raw fruit was rare and over-boiled vegetables were common poor accompaniments to meat.

Doctors saw nothing wrong with refined white flour and sugar. The concept of adopting a healthy lifestyle to *prevent* diseases was alien. Preventative medicine was for nurses. Dying of old age at 60 was natural; reaching 80 or 90 was freakish.

The controversy remained irresolute. Proponents knew they were right; there was too much coherence and evidence from personal experience, but it implied the medical community was wrong, or at best years behind. How on earth could that he?

After a lot of head scratching, a solution to the problem began to dawn. The source of the controversy was that doctors knew a lot about illness, but little about health, as reflected in their curriculum. If a man approached a doctor in the 1960s and said that he had no illness, no pain, and no symptom of disease, was feeling OK but wanted to become even healthier, the doctor would have been at a loss what to say. (Since they were taught only to analyse and treat illness, the thought would have occurred of referral to a psychiatrist). The fringe philosophy has only gone mainstream due to the great amount of research and evidence that now back its claims.

An interesting opportunity for a new branch of medicine has developed: the science of health, the quantification and gradation for the states of health. Whereas illness is classified and specified in great detail, the range of states of health is basically unknown.

Because of this shortcoming, research on the effects of diet on health is usually measured by its effect on cancer. The results of such research don't say a specific diet or treatment increased the health of the study group from level 3 to level 4, but instead evaluates percentage reduction in cancer. There is more to health than the absence of cancer.

The gradation of health is presently murky and subjective. Though health is of great interest for the public, it is not properly addressed by conventional medical training.

This shortcoming is responsible for the surge in popularity of non-conventional Eastern medicine, which has a holistic approach to health, rather than dealing with specific illness with dubious drugs.

Doctors are still taught how to diagnose and treat diseases but have little knowledge about health itself, which is much more than a single state of nonillness.

Numerous distinct levels of health can be specified. Recognition of these can play an important role in the prevention of illness, quality of life, longevity, energy levels, and mental health. Few subjects are of such great general interest, yet so little studied or formally taught.

An analogy exists in mental health. In the past only two states were recognised, madness and sanity, whereas now the majority are considered somewhere in between. The vast majority are afflicted with some form of disorder though they don't realise it: personality disorders, antisocial behaviour, narcissism, obsession, phobia, addiction, stress, mania, depression, anxiety, paranoia, hyperactivity, attention deficit, autism, bulimia, and insomnia. Few are totally free of any of these mental disorders.

The wholefood diet is effective for moving up health levels. It is also very cost effective in prevention of illness. The failing in recognition for such an important subject is remarkable. There should be "doctors of health" as a distinct specialised branch of medicine; their practitioners in spas and health clinics rather than hospitals.

The matter is too technical and important to be relegated to untrained laity. The profession of health specialists benefit society considerably, (even doctors would benefit, having the lowest life expectancy after retirement). Health is a person's most valuable possession after life. Its importance isn't reflected in university medical courses, which still consider health as the state of non illness.

Evidence in the past decades has confirmed that adherents of wholefood diets were right all along. A similar approach to theism, evaluation of its coherence, basic rationality, and feedback from personal experience should convince of its validity, whatever embedded counter values it may be up against. Those who followed the prevailing lifestyle of the 1950s, and ignored the wholefood diet paid for it heavily with their health.

Health is invaluable but its value fades to insignificance compared to eternal life. The controversy of faith deserves greater study.

Some discoveries yield information on the intricacies of nature, while others increase knowledge on health and quality of life. But which subject brings eternal comfort? Which subject can even claim it? Research can illuminate, confirm, or expose it. The resources required are not interplanetary probes or particle accelerators, but logic, humility, abandonment of prejudice, and wisdom.

In the controversy over healthy diet, if previous generations had been more enquiring or receptive to the philosophy, millions would have benefited from better health and longevity; instead millions suffered due to ignorance and the fear of appearing unconventional.

Even though the benefits of the wholefood diet are today clearly proven, it's still not widely observed. Like sin, junk food is tempting and gratifying. The wholefood diet lacks a catchy name or a fashionable image, is inconvenient, and is an acquired taste. Worst of all, it lacks corporate sponsorship and institutional promotion. It's not easy to give fresh vegetables a corporate brand or make money from carrots. Manufacturers spend billions of dollars advertising and promoting junk foods, analogous to the Devil's temptation to vice.

Individuals have to make considerable effort to get truthful information about health diets, whereas one is constantly exposed to the inaccurate, misleading properties of junk and processed foods. One has to struggle vehemently against the economic power constantly promoting convenience and instant gratification.

Just as there is abundant evidence to show wholefood diets have a tendency to induce a healthier prolonged life, there is also evidence to show that faith has benefits in this world and the next, yet society as a whole shows remarkable disregard for both, preferring lazy indulgence today, rather than lasting benefit in the future.

Further on the wholefood diet

The wholefood diet retunes the body to its pre-Industrial Age state, restoring the mind-body communication corrupted by processed refined foods, artificial flavours, and colours. This feature can be seen in its uncorrupted form in animals, who generally eat what their body tells them, which as a rule is what is best for them. Some nutritious seeds contain toxins; to neutralise these, parrots eat clay minerals, which is indigestible but has a high specific area and absorbs these toxins. Elephants do it also.

There can be little doubt that humans have a well-developed ability to communicate with their bodies, but this ability has been corrupted by junk foods. From infancy, processed foods compromise the body's ability to recognise nutrients. The feedback to the brain about the nutrient content is generally inconsistent with what is there. Confusion arises from unnatural additives such as sugar, artificial flavours, artificial colour, preservatives, texture and bulking agents, acidulants, and other chemicals. Further complication is introduced by economic, social and cultural factors that influence what we eat.

When a sugar surge occurs at the same time every day, the body anticipates it by reducing blood sugar levels and increasing stomach acid just before these times. Consequently, the body experiences hunger pangs or sugar cravings at those times that are allayed by sugary foods. The person then draws the false conclusion that its body needs sugary foods. The internal communication saying these extra calories aren't needed has been corrupted. The mechanism determining how much has been eaten doesn't function properly.

This mechanism is not fully understood yet, but sensors based on the lower side of the stomach walls gauge the degree of distension. The liver registers sugar levels derived from food. Over eons this distension is followed by a slow glucose rise, but processed foods produce rapid sugar rise without a proportionate distension.

If in response to hunger a person eats several spoonfuls of white sugar (very inadvisable), the liver tells the brain that a considerable amount of food has been ingested. This assumption, developed over eons, is based on the glycemic index of natural foods. A considerable amount of natural foods has to be ingested for this amount of glucose to be produced. But at the same time nerves in the lower walls of the stomach tell the brain no food has reached it, as there is virtually no distension. The conflicting signals confuse the brain. The future ability to gauge satiety suffers. (Hunger can be temporarily satiated by drinking water, which causes the stomach wall to distend, inducing a temporary sense of fullness, until the liver says no food has arrived).

A basis of the Atkins' diet is to diminish sugar surges by avoiding high glycemic foods; a first step to restore correct communication between mind and body. The next step is to consume only natural unprocessed foods, which the body is better adapted to deal with. The body then begins to send more accurate feedback concerning what foods are required.

Considering the importance of diet on physical and mental health, the degree of indifference by hundreds of millions of educated people is surprising. Junk food is consumed in vast amounts and obesity is pervasive.

A similar degree of indifference exists to spiritual health, which is potentially infinitely more important. Indifference is inexcusable.

The struggle is intensely personal; we cannot expect others to do it for us. Sufficient information is available.

The real problem is developing the will.

CHAPTER 12 CHRISTIANITY

Background

Judaism, Islam, and original Zoroastrianism and Christianity are strictly monotheistic. Christianity and Buddhism later developed personality cults, deifying the founders centuries after their deaths. Judaism and Islam are very similar in all major aspects; also the personalities of prophets play a minor role in the basic philosophy.

Muslims hate to be called Mohammedans to avoid the connotation of a personality cult, which would emphasise the role of the prophet at the expense of the monotheistic message. It's also why Muslims abhor images in places of worship; it detracts from the central premise of total submission to the singular God.

Muslims don't consider Islam to be an exclusive religion devised by the prophet, but a manifestation of universal monotheism like Judaism and Christianity before them

Without the cult component of Jesus, Christianity would closely resemble Islam and Judaism. Examples are Unitarian Christians and Jehovah's Witnesses, who consider Jesus a mortal prophet. Only Muslims appear to be aware that they worship exactly the same God as worshipped by Jews, Unitarian Christians, and Jesus.

Is Christianity a unique religion, as it considers itself, or a branch of monotheism, as considered by Muslims? A source of wonder is how Christianity has historically considered itself unique, while it shares most of its Scriptures with Judaism. Jesus never even attacked Judaism, but castigated its clergy for corrupting it and the Jews for their lack of faith in it. In fact, Jesus confirmed its basic precepts. His attack on the Pharisees was for corrupting and politicising the faith.

Why do religions become politicised and mired in extraneous minutiae? Because that is how it can best be manipulated for influence and power. The basics of religions are generally clear to laity, but interpretation of details requires clerics; the greater the intricacies, the greater the reliance.

Jesus castigated the corruption of the spirit of the law with the politically motivated overemphasis on the letter of the law. He emphasised compassion,

love, and forgiveness, all notably absent in Judaism. He demonstrated this in the parable of the sinner beating his chest for forgiveness, while the Pharisee, of great purity for fasting every week, looked down on him with contempt because he was a publican.

Besides compassion, love, and forgiveness, Jesus preached little that was different from Judaism. Jesus never even advocated a new religion, but tried hard to reform Judaism from its narrow inflexible interpretation by emphasising compassion, charity, and forgiveness, as well as reducing corruption of the clergy.

Of all religions, Christianity has the least grounds to suppose itself unique. Paul, a former fanatical Pharisee, after his conversion laid the foundation of Christianity by stressing compassion and love and changing regulations of Judaism to make it more palatable to Romans. An example was his waiver of circumcision, even though the Old Testament vehemently insisted on it. (The fact that the new religion was started by Paul doesn't compromise it. Validity depends on its fundamental precepts, and of course acceptance by God. Adherents subsequently born into the religion are unaccountable for events outside their control).

Initially, Christianity competed with the prevailing Roman state religion, which seems quaint today with its numerous colourful gods frolicking about in togas and sandals, but was deadly serious at the time. Thousands of Christians were tortured and murdered for refusing to eat meat consecrated to Apollo. Despite the absurdity of the Imperial religion, Christianity prevailed by the skin of its teeth. If Constantine hadn't converted to Christianity, Christianity could have remained a minor sect.

Following the collapse of the Roman Empire, Europeans would have retained some or all of the Imperial pagan religion, thus Apollo and Venus would perhaps still be worshipped or at least venerated in Europe today.

The status of Jesus

Though Christianity is similar to Islam, the greatest difference is over the status of Jesus. Catholics and Protestants regard him as God, whereas Unitarian Christians, Jehovah's Witnesses, and Muslims regard him as prophet, and Jews as heretic.

Another major difference is that Christians consider the Bible inerrant. Muslims believe it was inspired by God but later became corrupted.

Minor differences concern the crucifixion. Christians believe Jesus was killed on the cross, after hours of agony; Muslims believe he was caused to die and taken by God before the actual crucifixion, just as He delivered other prophets at crucial times; Abraham from the fire, Joseph from the well, Joshua from the lions, Moses from Pharaoh, Noah from the flood, Jonah from drowning etc.

Prophets all suffered numerous afflictions and adversities, but when their time was up, God usually saved them from agonising or humiliating death. If painful death for God's messengers is a sign of His love for mankind, which is irrational, then why did He save many of the prophets, often with great miracles?

03:55 They plotted, and God plotted. God is the supreme Plotter. He said: "Jesus, I am about to cause you to die and lift you up to Me. I shall take you away from the unbelievers and exalt your followers above them till the Day of Resurrection. Then to Me you shall all return and I shall judge your disputes."

Much has already been said on the numerous faults in the text of the Bible. In an exhaustive study, there is probably hardly a page in the totally free of fault or contradiction. In some cases, they occur more than once in a single verse.

Tobin has listed several hundred of the pretty serious flaws and contradictions. However as a testimony to its basic verity, despite such a drawback, it still has undeniable power and authority, which revolutionized the philosophy and morals of half of humanity. Its growing strength demonstrates a fundamental underlying source of power independent of quibbles in the text.

The major difference between Christianity and Islam is whether Jesus was Divine or merely a prophet. Though this cannot be resolved scientifically, a rational evaluation can give an estimate of the probabilities involved.

Some of the issues that need to be addressed are:

- If Jesus was the son of God, his birth would be the greatest event since the creation of the Universe, yet for the fear of Herod, a local tin pot despot, the whole matter was kept totally secret. Herod's slaughter of the innocents involved only a few villages, amounting to perhaps a dozen or less new born infants, otherwise it would have been mentioned by local historians of the time; another example of numerical exaggeration in the Bible. N.B. The Gospels give very differing accounts of this event.
- Though Jesus came for the benefit and salvation of all mankind, this great event was hidden and not proclaimed till at least 50 years after his death.
- His preaching was over after only a few months and was limited to only a few small towns in the area. Considering the staggering significance of the birth of God, and a period of thirty years gestation, a few months preaching in a few small towns doesn't seem appropriate for a god, but is normal for a prophet.
- Why didn't he preach outside Palestine? Why would the son of God be sent only to a tiny tribe from among all humanity; a tribe on whose leaders he never ceased to heap abuse? Why did he deliberately ignore the rest of mankind, especially the greatly influential Roman Empire, among whom he lived all his life? His actions resemble those of other prophets who preached to one tribe at a time while living among them as common citizens. These actions don't suit a son of God preaching to all mankind.

- Those that cannot see the inconsistence fail to appreciate the powers of God
 or reflect on the vastness of the universe and how incompatible these are
 with the partner of its Creator preaching to a few villages for a few months,
 while remaining astonishingly coy about his status as God.
- From the entire world, only the Wise Men mysteriously found out about the event. Having guided themselves to the birthplace by a totally inexplicable mechanism using stars, and having travelled all the way from Persia, they paid homage, gave gifts, then left never to be heard of again. Why is it that only they knew about such an earth-moving event?
- Having visited the baby Jesus and found what they were looking for, they too kept the affair secret. Why were they so mute about such an earth shattering event? If they considered him a prophet whose life may be at risk, it's understandable, otherwise unlikely. Could Herod not have been somehow restrained, to facilitate the ministry of the Creator of the Universe? According to John's Gospel, Jesus existed from the beginning of the Universe, i.e. from the big bang. The other three Gospels imply his existence began at his birth in Bethlehem.
- According to the Bible, the only other part of humanity to gain knowledge of this great event were some local shepherds to whom the angels revealed themselves, but who without prompting or warning, also decided to keep the whole affair secret, although they were specifically told by the angels to rejoice. Strangely they are never heard from again. Considering the dubious visions of ten year old children in Fatima and Lourdes, which quickly became great international pilgrimage sites, it's odd how the shepherds, having witnessed what must have been a most dazzling sight of a group of angels suddenly appearing in the night and talking to them, went home and no murmur is heard from them or their community again. When a mere thirty or so years later Jesus began to preach, none of them mentioned the miraculous event.
- What if Jesus had become ill and died in infancy? Would another son have been sent for the admonishment of mankind? Is this the least precarious or most suitable method to send a deity, in swaddling clothes? For a prophet there's no other way.
- How can an integral part of God be mortal? God could kill Jesus (something
 even the Pharisees managed) so does that make him a mortal god? How can
 Jesus be an integral and indivisible mortal part of immortal infinite God?
 The premise sounds contrived, more the confused notions of 5th Century
 bishops than the foundation of truth on which the Universe is based.
- Was it really necessary for him to work all his life as a carpenter? (His
 occupation is not actually specified in the Bible.) Is it appropriate for a deity
 to spend twenty years or so in manual labour, haggling over fees, fetching

water, doing chores, dependent on food to stay alive, threatened by disease? It would not have been so for a prophet, waiting to mature, tested like everyone else by the trials of this world.

- When a Greek woman implored Jesus on her knees to cure her sick child, he said it is not right to take the children's bread and throw it to the dogs; an astonishingly inappropriate, inconsiderate, and unnecessarily rude reply for a god sent to heal the world. Was there a limited mount of miracles he could perform? Could he not cure both compatriots and gentiles? Was his ministry racially directed? In curing her child, what would have been deprived from his own people? Wasn't his main objective the development of faith among all mankind? Wasn't this woman demonstrating very sincere faith in him? This is an extremely unsuitable response from someone who had come for the salvation of all mankind, beseeched by a pious grieving mother. It implies that he was sent for the benefit of the Israelites only, compatible for a prophet, but grossly conflicting with the mission of a god sent for all mankind.
- In reply the Greek woman said, "Yes, Lord, but even the dogs under the table eat the children's crumbs." Her humility and faith shamed Jesus to cure the child. When confronted with such an arrogant reply to her supplications, one wonders how the woman demonstrated more wisdom than Jesus himself; highly unlikely if he was God, but compatible for a prophet in a rash moment. We know prophets are fallible; though David had scores of wives, he arranged the death of an innocent subject merely so he could have his only wife. He arranged the murder of a loyal innocent soldier to satisfy lust for his wife.
- Jesus strangely avoided preaching to Romans, showing a parochial approach to his ministry, even though gentiles showed great willingness to faith. In one example, the piety of a Roman centurion amazed him, proclaiming verily he had not seen such faith among all the Israelites. Here again he declined to treat the centurion's daughter because she was Roman; a blatant contradiction with his role as saviour of all mankind, but somewhat compatible with a local prophet sent to Israelites.
- Astonishingly, Jesus himself never claimed to be the son of God. This isn't a
 triviality or technicality. Absolutely no reason can justify this reticence,
 which has to be the most inappropriate case of false modesty in history,
 unless of course he wasn't God.
- Indirect and vague claims of his divinity began sixty years later; the strength of claims was least with Mark, the earliest Gospel and most with John, the last Gospel (written in the second century after Christ).
- Such behaviour has precedence in other religions, reflecting a general propensity to deify the founder or ruler (Buddhism, Shintoism, Aztecs etc). Christians are still divided on the issue; several Christian sects and Muslims believe he was a prophet; Catholics, Protestants, and Orthodox not.

Soon after the Israelites rejected Jesus, Judea was destroyed, concurring with historical precedence in the Bible; nations that reject or kill prophets are often subsequently punished or destroyed. Jesus was rejected despite numerous miracles. Not long after his departure, the destruction was by the Romans under whose yoke they had chafed and for whose eviction they had subverted their faith. They had subjugated faith to politics, corrupting the spiritual for the temporal.

Religion had become compromised and politicised by the struggle against colonialism, even though Rome had granted them considerable political autonomy and religious freedom, (Herod had only recently with great expense built the temple complex in Jerusalem).

A major gripe against Imperial occupation was Roman tax, which in return for Pax Romana, considerable autonomy, peace and prosperity, was not an unreasonable trade off. The rest of the Empire appears to have acquiesced and prospered by it, including Egypt and Greece, whose illustrious cultural heritages rivalled Rome itself.

Some sceptics say Jesus never existed; others that he was merely a clever demagogue. Though not mentioned in any independent source, there shouldn't be much doubt that he existed. If he was made up, his personality would have been much more idealised and faultless. The main question is whether he acted on his own, or whether he was a messenger of God. If he was acting on his own, he must have been among the most sophisticated and innovative demagogues, but simultaneously and paradoxically among the least sophisticated politically. The conflicting contradictory nature lessens the probability he was acting on his own.

To help determine which he was, character profiling can help; based on a statistical branch of mathematics. There can be little doubt that Jesus was not insane, because his numerous enemies never made such claims; nor is there the slightest evidence implying it, thus his actions should fit a recognisable pattern.

People generally tend to behave in a predictable manner. Confusing behaviour and apparent irrationality is often due to misunderstood motivation. Fake prophets show a consistent pattern of behaviour, an essential component of which is personal benefit. Jesus' behaviour was, as a rule, the exact opposite. In fact, his actions show strong resemblance to many other prophets. He renounced a comfortable peaceful life as a professional craftsman to preach a radical change in the prevailing philosophy, which he knew would make lethal enemies. He never collected money for his ministry (TV evangelists note) not to mention his loss of income. His only benefit from preaching was the occasional free meal. Neither is there any mention of his engaging in any worldly pleasures, for which he showed little interest.

Even if he was an expert conjurer, he could easily have benefited from this for acquiring wealth, social esteem, worldly pleasures, influence, and power. To

have forsaken all this when it was his for the taking is just too unusual for a false prophet. He had powerful Roman centurions begging for his attention, and could easily have got favours, but didn't. What was his motivation? Impostors just do not behave this way, never have, never will. After clearly demonstrating his ability to attract large crowds, he could easily have made some accommodation with the Pharisees. If he had shown the slightest inclination to oppose Roman occupation, they would undoubtedly have backed him. They might even have sanctioned him as the Messiah (the Pharisees regarded the role of Messiah as saviour from Roman occupation).

Some may say he was too politically shrewd to provoke the Romans, but if so, why did he deliberately incite the fatal enmity of the Pharisees, attacking them at every opportunity and humiliating them inside their Temple? For a fake prophet execution at the hands of Romans or Pharisees is the same. If Jesus had been executed by the Romans, he would have become a political martyr. But his message wasn't freedom from colonialism. His message was revival of faith, which had become corrupted by politics and swamped by excruciating interpretation of legal minutiae by Pharisees. Jesus summarised them as straining at a gnat and swallowing a camel.

The prophets of the Bible and Koran as a rule are uncompromising on principles, as expected of messengers of God. Fake prophets invariably compromise and devise personal material benefit.

The Council of Nicaea

The event that formalised the son of God claim into mainstream Christianity was the Council of Nicaea in 325 AD, convened by Emperor Constantine, who was determined for political purposes to unify the church and rid it of potentially troublesome schisms.

Apparently he was inspired not so much by piety, but by a ruthless desire to consolidate power. He demanded the prominent bishops, summoned from Egypt and Syria, to prepare promptly a unified creed. Intriguingly, he showed total indifference to the outcome, and only demanded an end to differences of opinions and a rapid resolution. Though a recent pious convert, he showed no interest at all whether Jesus was the son of God or not, which is hardly a triviality.

The group advocating Jesus as a mortal prophet was led by Bishop Arius, who scorned the idea of an infinite entity joined to a finite one. The debate reached deadlock. Under increasing pressure from the Emperor to deliver a unified stand quickly, his opponents resorted to excommunicate Arius and his associates in order to end the stalemate. They then passed their own resolution, and forbade any dissent from it henceforth. Being the majority, this was arbitrarily backed by the Emperor and has become the primal Church dogma since.

Two months after the Council, Constantine treacherously executed his main political adversary, who was entrusted to his charge in a peace treaty. He then inexplicably killed his own son, who had served him diligently and faithfully. Then he ordered the death of his wife, who he had suffocated (by some accounts boiled) in her bath; strange behaviour for a pious Christian.

These together with the total indifference to the outcome of the Council, except that it be unanimous, implies he was using the church politically to consolidate power, especially in the Eastern part of the Empire which he had just taken control of following years of struggle and civil war. In a further example of very unchristian behaviour, he ordered the construction of a colossal fifty-foot marble statue of himself for his personal glorification; unprecedented by any other Caesar even though many of them had been proclaimed god.

The bishops at the Council had been till then viciously persecuted by Rome; some visibly disfigured by torture. The change in treatment they now received, lavish hospitality as guests of honour of the great Emperor at his palace in Nicaea, was in great contrast to their recent vicious persecution, torture, and imprisonment.

All that the Emperor had demanded of the bishops in their pliant state was a *unanimous* and prompt outcome. The pressure must have been palpable; hardly conducive to scholarly inquiry.

All opposition after the Council was forbidden by the Emperor, not for ecclesiastical reasons but for political expedience.

The dictatorship of the dogma thereafter was set in stone. This is not a suitable basis to determine the validity of such an important matter, and cannot be considered irrefutable grounds for conviction. The bishops were over their heads in the matter anyway.

Their ability to differentiate logic from dogma was perhaps not as good as modern scholars, such as Oxford University Professor of Church History C.J.Cadoux, who says the divinity of Jesus is rationally untenable.

More Questions on the Controversy

Further issues that need to be addressed are:

- Why is there absolutely no mention of Jesus' deity in the Old Testament? Numerous predictions are made, but for a matter of such immense importance, a strange and conspicuous silence is totally and glaringly incompatible. Predictions of the coming of a Messiah is given in Zachariah, so why not the coming of a deity? Is the coming of a messiah more important than the son of God?
- If Jesus were God, would he need to be baptised by the mortal John the Baptist to wash away his sins? Does God sin or need forgiveness? After this

baptism his preaching began. Does a god need initiation or clearance from one of his creatures to begin his work? Was John an intermediary between two parts of the trinity?

- If hypothetically, samples of DNA from Jesus were found today and cloned, what would be the consequence? Would man be cloning God and recreating Him? Now there's a paradox: man creates a god.
- Would genes of a god be somehow immaculate and different, or would they
 just be ordinary genes? If so, would God have genes evolved from animal
 species, themselves created by God? These detract from the viability of God
 being human.
- Was there really no other way to admonish mankind? Had such a drastic extraordinary measure become the only way? What was achieved by this method that couldn't have been achieved by sending a prophet? What did he do that could not have been done by a mortal prophet? Many prophets performed miracles before. What did he do that could only have been done by a god?
- What act, behaviour, or speech suggests that he was a god? There happen to be many instances that show he wasn't. If his deity was partially or wholly disguised, what was the point of it?
- If the premise that "God so loved the world that He sent His son for their salvation" was the reason, why was he sent only to a tiny fraction of mankind? Does the extremely parochial nature of Jesus' preaching fit the hypothesis?
- If that was the main reason, the message could have been better proven by a miraculous parting of the heavens to proclaim it. Why is there so much reticence in making it known? Why has the matter been so shrouded in doubt and confusion that it had become necessary to argue about the nature? There still exists a great deal of doubt and confusion today based solely on analysis of the text of the New Testament. The extremely vague claims for divinity and the considerable evidence in the text against it is totally inconsistent with the objective of sending a god.
- Sending a son does not per se prove He so loved mankind. It could just as well have been a very firm final warning.
- It's possible that Jesus could have had children, in which case would the children be semi-god? And grandchildren, quarter god? If he had married Mary Magdalene, which recently discovered Gospels infer, would that have made her a wife of God? Nowhere in the Bible does it say that he was celibate. In fact it would have been very unusual for a pious man to have remained unmarried till his thirties. It would have been so unusual that the Pharisees would have referred to it and used it against him.

- The Gospels state Mary Magdalene went to Jesus' tomb to prepare the body. Handling the naked body was strictly done only by the spouse, sister, or mother. Jesus' mother was alive at the time. Allocating the job to Magdalene gives a lot of credibility that she was much more than just an acquaintance of Jesus.
- According to the Bible, Jesus had siblings. Were they brothers of God? Did they know this? Did they feel any different from ordinary mortals? How can one be a brother of God and have no feature reflecting this amazing condition?
- There is no guarantee that his siblings could not be sinners, in which case a paradoxical situation could arise where the brothers of God (or nieces, nephews, and cousins) end up burning in Hell.
- How can a God be dead for three days? Where was his soul during this time? One can only assume that it must have gone straight to Heaven after death. Then why did it come back to earth to be rejoined with the dead partially decomposed body, followed by a second entry to Heaven in the earthly body? None of this is explained by the Gospels, nor makes much sense.
- How can Jesus be equal to the Creator of the universe who brought him back to life, or be of the same essence but of separate body, especially when he was dead? The more one analyses it, the less tenable the whole supposition.
- As a reflection on the general accuracy of the account, Jesus predicted he would stay three days and three nights in the heart of the earth, i.e. buried underground, but the Gospels are unanimous in saying that he stayed only one day and two nights in the tomb. This is one of the few things the Gospels were unanimous about. Also the tomb was not in the heart of the earth but above ground.
- Both Muslims and Christians believe Jesus was conceived of the Holy Ghost, then why is the title of Father not given to the Holy Ghost.
- If the Holy Ghost is part of God, why is there absolutely no mention of this in the Old Testament?
- What could be the motivation of God to divide His entity and share it with others, especially since these others are themselves entities created by Him? This required the greatest motivation in the history of the universe. The reason given by Christians is that He wanted to show His love to the world (which doesn't fit with much of humanity burning endlessly in Hell). Was there no other way? Does the enormity of the action suit the objective?
- By God's own measures, humanity doesn't deserve such an enormous amount of love. The afflictions and punishments that humanity constantly

suffers demonstrate it, let alone the fate of Hell, which awaits many. (According to the Bible, 124,000 will go to Heaven, and the rest of humanity, tens of billions of them, will go to Hell. One can assume 124,000 good people have lived and died by now, thus there's little point in trying any longer. Another example of dubious numerical descriptions.)

- If it was necessary to beget a Divine son to prove God's love of mankind, there are other more important issues that have higher priority for the welfare of humanity. Why has no proof been sent for those? Examples are: the actual existence of God, the existence of life after death, the existence of Heaven and Hell. Proof for these have more importance for human welfare than proof of the love of God.
- Proof of the love of God is a means to an ends, for example to inspire greater faith. It is not an ends in itself, thus has less importance than the ends. The creation of another God has to be the greatest event in the Universe, but its justification is incompatible with the objective.
- This momentous objective, proof of the love of God, is not even stated in the Bible as the reason for sending Jesus. This is hardly a triviality.
- A strange concept: God, the creator of space and time, should divide His divinity into components of the same space and time He created. Would God limit himself to a tiny part His own created dimensions? By definition, He existed outside of and before the creation of the universe.
- The creation of a son could serve as a vehicle to deliver an ultimatum, change or be destroyed, which is actually what happened; the Israelites didn't heed Jesus, didn't change and Judea was totally destroyed by the Romans soon after.
- Some say allowing His only son to be killed is proof of love, but that
 involves purely human values. Man grieves for a dead son because he
 cannot bring him back to life. There is nothing to prevent God from bringing
 Jesus back to life thousands of times.
- The death of Jesus involved merely a change of physical state from a rather uncomfortable one on Earth to a much nicer one in Heaven. Where exactly is the sacrifice?
- What if Jesus had not been persecuted and not condemned to death, but instead happened to have been treated well and feted as a Saviour; how would that fit with the premise that his sending was proof of the love of God? Would the proof work only if he were badly treated and killed? Was he sent deliberately to be killed? Did he antagonise the Pharisees so they would kill him, or did he do so to convey an important message?
- God may choose at some time in the future to bring other life forms, animals or aliens, into the picture and exhort them to faith (can only the human

species have faith?). Would that require a Divine offspring in the form of that species to show His love for it? Would that involve a Divine crow, Giant Pacific Octopus, termite ant, or space alien? It may sound preposterous, but the notion of a Divine human will be just as ridiculous from the view of other species. One species is just as good as another from a genetic or evolutionary basis. God could easily have made other species engaged in the trial.

17:85 They put questions to you about the Spirit. Say: "The Spirit is at my Lord's command; little indeed is the knowledge vouchsafed to you."

03:58 Jesus is like Adam in the sight of God. He created him of dust and then said to him: "Be" and he was.

The Koran says that from God's perspective Jesus is like Adam, both created anew. That would explain all the weird questions that arise otherwise. The claim that he was sent as proof of the unconditional love of God detracts from coherence.

- God can create anything by saying: "Be." What could be the reason requiring the creation of a new God, or the division of God's entity? On a cosmic scale, there must have been an immensely great motivation for it.
- Astonishingly the Bible, as the only source for this, is totally vague about it,
 which is exactly why there was so much contention about it at the Council
 of Nicaea.
- Why isn't the Bible explicit on a matter of such enormous importance, leaving the issue open to interpretation? The question is not "why is there no proof" for the Divinity of Jesus, but rather "why is there no claim for it in the Gospels"? This is truly amazing.
- Christians believe the premise not on the basis of irrefutable revelation, but on questionable interpretation of fourth century clerics, many of whom were disparaged by other Christians as appeasers and collaborators with their idolatrous Roman persecutors, unlike many of their colleagues, who hadn't collaborated and were martyred.
- From Creation till the birth of Jesus, there must have been a state of Duality, which after his birth then became Trinity. Why is no mention made of the Duality in the Old Testament (or for that matter in the New Testament)?
- Did the state of God change from Unity to Trinity with the birth of Jesus? This implies the Holy Ghost also became God at the same time. Why are there so many discrepancies and faults in a matter of such fundamental importance? Why is the Bible so confusing and vague on this immensely important subject?
- In fact, the Old Testament stressed repeatedly in the most unequivocal terms possible the *Unity* of God, which is the basis of Commandment Number

One. It exposes a major discrepancy between the Old and New Testaments on a matter of very fundamental importance. One should remember that Jesus himself firmly believed in and affirmed the Old Testament. His quarrel was over its implementation.

- When Jesus was ill in infancy, did the bacteria of his infection, or Herod's soldiers when they were searching for him, cause the Trinity to teeter on the verge of Duality? For thirty or so years after his birth there was Trinity, but on Good Friday this reverted back to Duality for one day and two nights, which then reverted back to Trinity. Surely the order of the universe is based on sterner stuff.
- Can more changes be possible, the number increasing to a Quaternary some day, or perhaps even more? No mention is made in the Gospels that the present state is final. By precedence, more Gods are possible, as yet unborn.
- If other alien civilizations exist, or if some animal species reach a state of consciousness similar to humans, would it become expedient to send a god in the form of that species to prove God's love for it?
- The principle of Indeterminacy is a cornerstone of the theory, which is why no definite proof has been or will be forthcoming. If Jesus is son of God, necessarily this cannot be proven, then what is the use of the notion and how does it *prove* that God so loved the world that He sent Jesus?

05:17 Who could prevent God from destroying the Messiah, the son of Mary, together with his mother and all the people of the earth? His is the kingdom of the Heavens and the earth and all that lies between them. He creates what He will and has power of all things.

On his last night, Jesus was terrified of death and the prospects for the coming day:

Mark 14:34 "My soul is overwhelmed with sorrow to the point of death."

Luke 22:44 And being in anguish, he prayed more earnestly, and his sweat was like drops of blood falling to the ground.

Astoundingly this occurred immediately after the angel of the Lord had appeared to him to strengthen him. If the angel had not strengthened him, he might have actually died of fright. If an angel appeared to anyone to strengthen him about his death the next day and confirm his entry into Heaven, most would not be so terrified or anguished at the prospect of death; (the appearance of the angel would be a much greater cause of shock and terror).

Which does his terror resemble more, the actions of a God or that of a mortal prophet? There is nothing godly in his terror of death, let alone the absurdity of a god dying. Does a god need to pray for supplication? If anyone were convinced that on death it would go straight to Heaven, what exactly is the cause of terror?

Millions of Muslims embrace death on far less evidence of going straight to

Heaven and without the apparition of angels for support and comfort; they show more courage and trust in God than Jesus did, which presents a strange paradox.

The horror Jesus exhibited of his transition to the next life, despite the evidence of all the miracles he had performed, despite the powers that clearly were granted to him by God, suggests more lucidly than anything else that he was a mortal, ingrained like all the rest with an innate fear of death.

Muslims about to be martyred are also afraid of death. They can't eliminate this natural fear, but instead subjugate it to nobler causes that justify the ultimate sacrifice. The weakness and terror Jesus showed is absurdly incompatible with his participation at the creation of the universe as implied by John's Gospel.

Having prayed to God fervently all night for deliverance, is it surprising that God would deliver Jesus from a humiliating, painful, and protracted death? If Jesus were the son of God, he should not have been afraid of anything in the universe, including death, a minor phase transition from an earthly to a heavenly form. He could also easily control or banish pain, a trivial affair compared to his miracles.

A truly astonishing fact little appreciated by non-Unitarian Christians: nowhere in the Bible does Jesus claim to be God. They are unwilling to re-evaluate the inherited dogma even though many Christian scholars refute it.

A notable source of confusion is the way idioms were used in the Gospels. In the Bible numerous use is made of terms such as: son of God, child of God, children of God; our Father in Heaven etc. All were common colloquial idioms of the age, not meant literally. Other commonly used figurative idioms in the Bible are: "Son of David, daughter of Zion, king of Israel, king of the Jews." Paul tells a congregation in Galatians 03:26 You are all sons of god.

John recounts a dispute between Jesus and some malevolent Jews:

John 08:39, "Abraham is our father," they said... Jesus said, "... Abraham did not do such things. You are doing the things your own father does." "We are not illegitimate children," they protested, "The only father we have is God himself."

Such phrases were used even in a *legal context* in the above dispute. By the same logic that Christians use to claim Jesus is the son of God, this group of Jews believed Abraham was God. It was customary to use such terms freely. The Jews quoted themselves to be sons of God, Abraham, Moses, and David. Literal interpretation is absurd.

The Jews were forbidden to invoke the name of God in vain, thus they used other ways to refer to God without actually stating His name with such terms as "our Father." They used the term Jahveh instead of the full term Jehovah. The consonants are the same but the vowels are changed, thus technically they weren't uttering the name.

Who is a better arbiter on the subject than Jesus himself? Not only did he never refer to himself as the son of God, but on numerous occasions Jesus referred to himself as the "Son of Man", which is utterly incompatible with son of God,

totally contradicting it. Why is more authority given to John than to Jesus himself, especially as nobody knows anything about John? His Gospel differs substantially from the others and shows signs of fabrications, exaggerations, and contradictions yet is given more authority than Jesus himself.

John 20:17 Jesus said, "Do not hold on to me, for I have not yet returned to the Father. Go instead to my brothers and tell them, "I am returning to my Father and your Father, to my God and your God."

He leaves little doubt about his mortal nature. Should one take his word for it, or should one dismiss his statements as false modesty, and replace them with claims of over-zealous authors and bishops, about whom we know practically nothing, except that their accounts are contradictory and can be proven to have been embellished?

Mark 10:17 As Jesus started on his way, a man ran up to him and fell on his knees before him. 'Good teacher, "he asked, "What must I do to inherit eternal life?" 'Why do you call me good?" Jesus answered: "No one is good except God alone."

Why would Jesus make such definite and explicit statements, which scuttle any claims of Divinity at best and cause confusion at least, if he was Divine? Why are such statements from Jesus given less authority than disputed claims formulated centuries later under intense political pressure?

Paul's Message

Paul was sentenced to death by the Pharisees and very nearly lynched by them. (Conspiracy theorists should be fascinated by the sudden appearance of Roman soldiers, who accidentally happened to be nearby, saving him at the last instant. This sudden serendipitous appearance of a handful of Roman soldiers was a major turning point in the course of history.)

As a Roman citizen he appealed his death sentence to Caesar and on his way to Rome preached to Romans wherever he could.

Consider a modern analogy: an obscure priest from Zimbabwe say, under capital punishment, is preaching to Europeans that they are living in sin and must totally change their ways and adopt a new strict religion that forbids most of life's joys. The Romans indulged in a lot of these, including widespread homosexuality for both sexes (according to Paul). He even discouraged marriage, proposing instead total chastity and celibacy. However to make it more palatable for Romans and Greeks, he dropped the strict requirement for circumcision. He made fundamental changes in the philosophy, placing less importance on the letter of the law and exalting instead spiritual values. The very essence of Christianity is summarised by Paul with sublime beauty:

Galatians 05:16 So I say live by the Spirit, and you shall not gratify the desires of the sinful nature. For the sinful nature desires what is contrary to the Spirit, and the Spirit what is contrary to the sinful nature. They are in conflict with each other, so that you do not do what you want. But if you are led by the Spirit, you are not under law.

The acts of the sinful nature are obvious: sexual immorality, impurity, and debauchery; idolatry and witchcraft; hatred, discord, jealousy, fits of rage, selfish ambition, dissensions, factions and envy; drunkenness, orgies and the like. I warn you, as I did before, that those who live like this will not inherit the kingdom of God.

But the fruit of the Spirit is love, joy, peace, patience, kindness, goodness, faithfulness, gentleness, and self-control. Against such things there is no law. Those who belong to Christ Jesus have crucified the sinful nature with its passions and desires. Since we live by the Spirit, let us keep in step with the Spirit. Let us not become conceited, provoking and envying each other.

It is difficult to overestimate the power and importance of the new philosophy or its tremendous pivotal role in human history. It debased the excruciating dogma and inflexible rigidity of Jewish laws, exposed the decrepit spiritually barren Imperial religion, and inspired the human spirit to cosmic heights. The new philosophy of love, compassion, charity, and forgiveness had little precedence in human history.

The piety of converts was of astonishing intensity; greater than the value of life itself. There can be little doubt that this was noticed by Constantine, which drew his attention to harnessing the extraordinary power it held over its adherents. All he had to do was rein it to his advantage. This could explain his inexplicable haste to get a unified creed while being indifferent to its content. Also he didn't appear to hold himself in any way accountable to its rules.

Despite humble beginnings, under arrest, and with a death warrant, Paul preached undeterred to the Romans, whose sophistication and culture dazzled the West for the next thousand years. Against great odds, he planted the seeds that grew to conquer the heart and soul of the Roman Empire. There was no cultural vacuum he exploited. The Romans weren't tired of their hedonistic lifestyle, weren't even aware of their decadence, nor were there mass movements for reform. The Romans ruled culturally as well as militarily. Their colonies were all in awe of their cosmopolitan civilization. Many, including Britain, were in a state of complete cultural intoxication. The culture shock was so complete that Roman cultural hegemony remained centuries after the last legions had departed and the Empire had collapsed. For a thousand years after that, Latin was still the language of learning and education throughout Europe.

Similarities exist today. Many parts of the world are cultural colonies of the West. The world competes to emulate Western society and values, discarding great swathes of their own. Westernisation equates with advancement and progress. Many colonies still imitate former colonial masters decades after independence and despite the lack of external pressure. Notable exceptions are Islamic nations, which show the most resistance to "advancement" much to the confusion and irritation of the West, who cannot understand why they insist on remaining backwards, not allowing bars, discotheques, public nudity, pornography, gay pride parades, or carnivals.

Considering his success, it is astonishing that Paul's doctrine advocated relinquishing most of the pleasures the Romans enjoyed. His revolutionary concepts were not designed to appeal to man's base sentiments, but to his noblest: love, joy, compassion, faith, patience, kindness, gentleness and self control. The love he referred to is increasingly unrecognisable in Western society today. The modern version is the hormone driven type. The love he meant is self-less, given with no expectation in return; only that it please God. This love is not directed at pretty young things, is unrelated to physical attraction, but is felt for the poor, the weak, the old, infirm, neighbours, strangers, the sick, as well as family and relatives.

Romans: 12:09 Love must be sincere. Hate what is evil; cling to what is good. Be devoted to one another in brotherly love. Honour one another above yourselves. Never be lacking in zeal, but keep your spiritual fervour, serving the Lord. Be joyful in serving the Lord. Be joyful in hope, patient in affliction, faithful in prayer. Share with God's people who are in need. Practice hospitality.

Bless those who persecute you; bless and do not curse. Rejoice with those who rejoice; mourn with those who mourn. Live in harmony with one another. Do not be proud but be willing to associate with those in low position. Do not be conceited....

Do not be overcome by evil, but overcome evil with good.

For centuries such verses inspired the human spirit to soar to unprecedented heights. The Christian spirit swelled with compassion and forgiveness. Bible thumping TV evangelists fail to appreciate these concepts. They have developed into the politicised clergy they detested in established Churches. Megadollars have begun their corrupting effect; pure Christian principles are compromised by vested interests and lobbies.

They support every atrocity Israel commits against Palestinians, even though it is the last remaining country that is an illegal occupying power and officially enforces Apartheid and resorts to civilian massacres and cordons Palestinians to ghettoes.

If Paul were to see the state of morality today in the West, it would appear more like pagan Rome than the product of a millennium of Christianity. The West cannot see its decadence but only sees its democracy. It fails to see that freedom and democracy are means to an end, not the ends itself. These have become the cause of decadence; anything the majority wants becomes acceptable.

If there is no life hereafter, Western culture is a successful source of emulation. If there is life after death, its values will not count for much. Unrestrained pursuit of pleasure, loose morals, and worship of materialism will all be sources of regret.

Europe is experiencing a strange reversal back to paganism and superstition after fifteen centuries of Christianity.

Historical Accuracy

When evaluating the Gospels, one should remember that the standard of accuracy customary today is only a recent development. Accuracy and reliability of information is a valuable economic asset. The worlds' media and news services depend on it. But in the past its place in the order of priorities wasn't high; priorities were probably:

- Present the author or a particular party in good light.
- Entertain with a good story.
- · Attract and keep the attention of the reader
- Indulge the reader; cater to his tastes.
- Get a message across.
- Accurately portray events.

One of the first great historians was Xenophon. In his book on the Persian civil war, (he was part of a group of Greek mercenaries hired by the Shah's brother to fight against the Shah), he has presented an exciting very readable account of the war. One cannot fail to be impressed by the qualities of his leadership, endurance of hardships, morality, and integrity. His warnings always turned out to be amazingly correct. All disasters were accurately predicted by him alone through his expertise in examining entrails of sacrificed animals. All those who ignored his advice invariably suffered for it. All traitors were presciently recognised by him. He did and said all the right things at the right time. He always made the right decisions, saving his army repeatedly from destruction through unfailing wisdom and foresight. The narrative is so convincing, the details so realistic, the atmosphere so palpable that the reader cannot help but being drawn to his opinion. The modern equivalent of this effect comes from watching a well-made film, where historical accuracy is relegated way below entertainment and art. Historical films from Hollywood still appear to strictly follow the above order of priorities.

For years after the campaign, Xenophon was criticised for his role in it. He wrote his book, twenty years after the event, to answer this criticism; in the process becoming among the first historians.

Scholars are beginning to realise that his and Herodotus' histories cannot be taken too seriously. If instead of Xenophon's personal reputation, an ideology was involved, greater complications and increased inaccuracies could be expected. When an account is written decades after the event, the probability of inaccuracies inevitably increases, especially when it's not based on contemporary notes. Matters are worse when the author is not using his own memory, but is relating verbal narrative collected from various sources many decades later, each of which has been changed to appeal to different cultures. The loss of all original

documents, the lack of any independent authority to monitor the accounts, and a prevailing culture that placed little importance on historical accuracy, all inevitably induce the truth to be considerably compromised. In such a state, it is not surprising that numerous inaccuracies, faults, or contradictions exist in the Gospels. In fact it would have been very surprising if it didn't.

The embellishments may have been in good faith to ensure the survival and propagation of the cause; the means justifying the ends. Problems arise when these are literally believed today as the infallible word of God.

Truthfulness of the Gospels

Each Gospel has its own style based on the character of the author and the intended audience. The first of the Gospels is Mark, written in Aramaic in Rome about forty years after the death of Jesus. It was based on the Urmarcus writings, of which Papius, an early Christian writer wrote: "The elder John used to say, Mark having become Peter's interpreter, wrote down accurately whatsoever he remembered. It was not, however, in exact order that he related the sayings or deeds of Christ. For he neither heard the Lord nor accompanied him, but subsequently attached himself to Peter who used to frame his teaching to meet the wants of his hearers, and not as making a connected narrative of the Lord's discourses."

Dr. C.J.Cadoux, Mackennal Professor of Church History at Oxford University. says about this Gospel: "It was written after Peter's martyrdom (65 AD), and a time when Mark, who had not himself been a disciple of Jesus, apparently had none of the disciples of Jesus within reach by whose knowledge he could check their narrative. These circumstances of its composition account for the existence in it, side by side, of numerous signs of accuracy and a certain number of signs of ignorance and inaccuracy." The Gospel of Matthew was written in Greek at the Hellenic city of Antioch about 90 AD. He also was not one of Jesus' disciples (none were) and little is known about him. His Gospel was based on the Urmarcus and also on another lost document called "Q." Cadoux says of him: "But a close examination of the treatment he gives to his borrowings from Mark shows that he allowed himself great freedom in editing and embroidering his material in the interest of what he regarded as the rightful honouring of the great Master. The same tendencies are often visible elsewhere when he is producing "Q" or providing matter peculiar to himself. Anything therefore, strictly peculiar to "Matthew' can be accepted as historical only with great caution."

Matthew may have made such changes to appeal better to Greeks among whom he lived, whereas Mark's Gospel was suited more to Roman tastes.

The third Gospel was written by Luke in Greece around 80 AD, for the benefit of "the most excellent" Theophilus, probably a high official of the Roman Empire. Understandably Luke may have compromised historical accuracy to better influence his Excellency. It is an apologetic account addressed to the gentiles, catering to their tastes based on his acquaintance of them.

Changes were made with the best of intentions. With Christianity teetering in its precarious infancy, here was an opportunity to make a breach. If his faith had been stronger, he would have placed more faith in God than a Roman official. Would God have allowed the faith to disappear? Was His backing less effective than Theophilus'? The conversion of Constantine did more for Christianity than all the well-intentioned changes, which are now so difficult to unravel.

Luke had been a travel companion and friend to Paul. In addition to the Urmarcus and "Q", he is said to have used other lost documents, peculiar to himself. Unfortunately he appears to have taken even greater liberties with his sources than Matthew.

All these pale in comparison to the liberties taken by John. Next to nothing is known about him, other than he wrote his Gospel around 115 AD, in or near the Hellenic city of Ephesus (in modern Turkey) with more flourishing rhetoric than the others.

The first three Gospels are known as the "Synoptic Gospels", because they are based on the lost documents mentioned above, and generally have much in common. John's Gospel is different. In the poetic opening lines, he alone implies that Jesus was present at the very beginning of Creation:

John 01:03 "Through him all things were made; without him nothing was made that has been made."

One can only commiserate with Christians, who wish the Bible would make its mind up and present a unified account. Why is this momentous disclosure made only here in John's Gospel totally ignored by the others? Why was this astonishing claim kept secret throughout the Old Testament and most of the New? Why did Jesus not mention or even insinuate it? Was the terrified Jesus in the Garden of Gethsemane the same who unleashed the big bang?

Cadoux writes: "The speeches in the Fourth Gospel (even apart from the early messianic claim) are so different from those in the Synoptics, and so like the Fourth Evangelist himself, that both cannot be equally reliable as records of what Jesus said. Literary veracity in ancient times did not forbid, as it does now, the assignment of fictitious speeches to historical characters. The best ancient historians made a practice of composing and assigning such speeches."

A source of many of Christianity's troubles is its reluctance to accept that faults could exist in the Bible. The claim of inerrancy is self defeating. Many Christians are put off by the errors and atheists use them as proof of human fabrication, but their deduction is wrong because they are based on the following false assumptions:

- The Bible today is exactly the same as the original.
- It cannot be corrupted by man.
- Man is incapable of mistakes or mischief.

- The Bible is the only book sent by God.
- If God sends down Scriptures, they must be faultless, free from flaws or contradictions, written in such a way that they will be considered by scholars as indisputably the work of God. In other words, not only will the text be perfect in every way, but perhaps one may expect an occasional give away, such as the occasional law of physics thrown in for good measure, which would contravene the fundamental precept of indeterminacy.

Atheists should consider the logic of another hypothesis: since the Bible has become corrupted, God has sent another book, to confirm the original Scriptures and act as another guide for mankind. If He hadn't sent the Koran, a pertinent question may have been: since the Scriptures have become corrupted, why doesn't God send another?

The Koran on the Christians

The Koran says to the Christians:

05:68 Say: "People of the Book, you shall not be guided until you observe the Torah and Gospel and that which is revealed to you from your Lord."

The first step for Christians to develop faith is to observe the laws in the Bible; to accept it as a Heavenly inspired book. God would not penalise later generations for the mistakes of early scribes.

Despite the flaws, the Christian must first open his heart to it. God will then strengthen faith. *That* will be the basis of faith, not the detailed study of the wording of the Bible.

The Bible is not inerrant, nor was it dictated by angels. It doesn't even claim inerrancy. The Gospels were second and third hand oral narrative written many years after the events. The Bible is a collection of articles by scores of authors, about whom little is known. Some were later taken out and others added. We know little about the editing, how many editors, who they were, or what their criteria were. Recently discovered Gospels (at Nag Hammadi) might have been included initially.

There is clearly an underlying validity to the Bible. Some physical events it describes have been corroborated from independent sources. Christianity could not have developed without its intrinsic power. Without its basic verity millions of educated rational adherents, from diverse cultures throughout the ages, would not have been able to develop the strength of their faith. These were not developed from detailed study of the wording in the text, but from the vibrant faith felt from an external source.

05:65 If the People of the Book accept the true faith and keep from evil, we will pardon them their sins and admit them to the gardens of delight. If they observe the Torah and the Gospel and what is revealed to them from God, they shall be given

abundance from above and beneath. Some of them are righteous men; but many of them do nothing but evil.

If the Bible has been corrupted by early scribes, Christians are not going to be penalised for it. The very act of seeking the truth is what counts; this requires approaching the Scriptures with sincerity and an open mind. If one were to embrace faith, then discover a spiritual vacuum, one could be excused for abandoning it. If God exists, the searcher will feel a response. Events will fit a recognisable pattern. Life will lose its meaninglessness.

Contradictions in the Scriptures can be ignored, but not the vibrant force the individual experiences derived from it. Whoever seeks the truth with sincerity and piety will find it. In insisting the inerrancy of the Bible, Christian clergy make the task unnecessarily complicated, instead of facilitating and clarifying it; their main responsibility.

Cultural Impediments

The single greatest impediment to faith is pride, the most insidious deadly sin. (It caused the Devil's downfall, and is the first recorded sin). Jesus put great emphasis on humility, and Islam is based on the imperative to wage internal jihad against the self to subdue pride and selfish desires.

The Koran also disparages religious pride.

05:18 The Jews and the Christians say: "We are the children of God and His loved ones." Say: "Why then does He punish you for your sins? Surely you are mortals of His creation. He forgives whom He will and punishes whom He pleases."

Humility is the first step towards piety; pride its greatest obstacle. No group should consider itself children of God, or His chosen beloved, superior to others. Muslims never dare consider themselves or their prophet anything more than slaves of God.

Another major impediment to faith for Christians is the "road to Damascus" syndrome; a fatal misconception that one can go about doing what one wants with an occasional nod to the Church perhaps, until confronted with a religious experience, a calling to faith.

The historical source for this is the conversion of Paul on the road to Damascus and the apparently abrupt manner Jesus chose the disciples. He called Simon, Andrew, James, and John to drop their nets, apparently without any explanation, (except "I will make you fishers of men"). They did so without hesitation. On seeing Matthew sitting at the tax collector's booth, Jesus said: "Follow me", and he promptly did so, leaving his job and income. These induce a vague notion that God takes the first step, by revealing an unambiguous sign or inducing a religious experience as an initiation to active faith.

The attitude is mortally wrong; implying those who don't get invited can go about as they wish. The notion that Jesus loves everyone anyway reinforces it. If this was true, he wouldn't have shown such hostility to the Pharisees, Sadducees, unbelievers, Romans, Greeks, and the rich. If God loved everyone regardless, there would be no Hell.

Waiting for a "road to Damascus" event is dangerous. Death often comes unannounced. Instead of expecting a religious initiation event, one must proactively search for truth. Humans are hard wired for it, manifest in their unique obsession with spirituality and the supernatural.

The response will be recognisable from an intelligent source rather than dumb Nature. God does not hide from those who seek Him. Those who seek will find, without fail.

The extent of the response depends on the sincerity of the search. Humanity is not collectively delusional. The resulting awareness is the closest one can get to God. The strange awareness of a parallel spiritual world prevails despite lifelong conditioning from rational interaction with the physical world that it doesn't.

Astonishingly physicists have found evidence suggesting a parallel universe coexists. Though no one claims it's the same spiritual one, it imparts credibility to the outlandish concept by its similarity.

The strength, nature, and timing of feedback depend on the individual, the more the piety the stronger the response. The least pious expect the most overt signs, but will get the least. The Koran says even if clear miracles were shown they would think their eyes were dazzled and persist in disbelief.

Atheists say supernatural awareness is self-delusion, which implies humans are more delusional than animals. In most areas humans differ with animals by degrees, in spiritual awareness the difference is total, profound, and absolute.

The human race has fared much better than animals; could human spirituality have been acting as a brake all along, as considered by atheists? Have many of the greatest minds of all time been unaware that they were delusional?

Studies show believers have better mental health and are less likely to suffer from depression or commit suicide, which is hardly compatible with mass delusion or mental illness.

The majority believe in God or the supernatural, even though there is no physical evidence for it. They don't do so in deference to Pascal's matrix, but because of spiritual experience. Most are capable to discern the difference between this and delusion or wishful thinking. It's safe to assume most of humanity is normal. If the majority experiences it, it's unlikely to be non-existent or merely a quirk of the mind.

Each individual has obligations to the Primal Covenant lurking in the psyche. The extraordinary capacity for abstract thought has been endowed for the purpose. Life's greatest mistake is to ignore it.

Christians tend to shape Christianity to suit their culture. Jesus didn't eat pork, but they do. Jesus ate frugally and regularly fasted (sometimes for forty days) but they don't. Though he specifically confirmed fasting, (Matthew 09:14 and Mark 02:18), Christians generally refrain from it. Instead they have turned religious holidays into feasts of overindulgence and gluttony. Easter for many is now associated with chocolate eggs.

Even though Christianity has been adapted to suit the prevailing culture, many Christians still ignore it. Paul and the Apostles would not recognise the Christianity prevailing today because it has been changed and adapted so much. In modern Europe, the only remaining major abstinence by Christians is church attendance, now at record low levels. In the UK it is about one percent; many churches have been boarded up or sold or used for Saturday night Bingo.

Instead of influencing social values, the Church is guided by them.

CHAPTER 13 JUDAISM

Fundamentals

Judaism is confronted by fundamental unresolved issues that need to be addressed. Is it the only true religion? How does it regard Christianity and Islam; both closely related and share basic precepts. Are they divinely inspired? Christians and Muslims believe in the Old Testament, but is it the only book sent by God? How do Jews rationalise their favoured status with Biblical scale scourges, even in modern times?

The traditional justification for their state of favour is that they are descendents of Abraham, but Arabs are also descendents of Abraham. Do Isaac's descendents count, but not Ishmael's? Isaac's mother Sara was a free woman, while Ishmael's mother Hagar was a former slave. Does the precept induce a perception of class superiority as well as a racial one? (It's ironic that Jews have historically been at the receiving end of both among gentiles). When considering a genealogy pyramid with Abraham on top and millions of Jews at the bottom, it is just as valid to consider an inverted pyramid with millions of ancestors on top, only one of whom is Abraham, and the individual at the bottom.

According to the Old Testament, Heaven has 240,000 places, all of which been accounted for by Jews. Is race a parameter for salvation?

John the Baptist made his views on racial conceit quite clear:

Luke 03:07 Brood of vipers! ... bear fruits worthy of repentance, and do not begin to say to yourselves, "We have Abraham as our father." For I say to you, if God so wished, He could turn these very stones into the descendents of Abraham.

For centuries Christians also believed they had exclusive rights to salvation. Only in the 1990s did Pope John Paul II proclaim salvation was also available outside Christianity, thus officially and inadvertently discrediting the justification for the Crusades and the Inquisition.

2:113 The Jews say the Christians are misguided and the Christians say it is the Jews who are misguided. Yet they both read the Scriptures. And the pagans say the same of both. God will judge their disputes on the Day of Resurrection.

Any religion, which claims salvation for its followers alone, induces religious arrogance, while indirectly implying God is unjust. Would God cause all mankind to burn in Hell forever because they were not born to Jewish or Christian parents? Such arrogance drove apparently pious men to extreme cruelty in the Inquisition and the Crusades.

General Religious Conceit

Despite atrocities, Crusaders considered themselves pious Christians. They burnt alive thousands of peaceful unarmed Jewish civilians in Jerusalem. Killing Muslim civilians was a religious virtue. According to their accounts on the fall of Jerusalem, they waded to their knees in blood, weeping for joy at having done such great deeds for the sake of Jesus.

Richard the First ordered 2800 Muslim women and children in his custody massacred in cold blood solely to avoid the expense of feeding them; there wasn't even a famine or food shortage. His soldiers disembowelled every one of them to recover jewellery they may have swallowed. Crusaders sifting through the guts and entrails of 2800 women and children epitomises the nature of the Christian Crusades at the peak of its piety, under the leadership of one of its greatest heroes. Instead of "lion-heart" a more suitable epithet is hyena-hearted.

For fourteen centuries, Christians and Jews lived in peace under Muslim rule in the Middle East and Africa and a nearly a millennia in Europe, but as soon as Christians came to power, they showed a remarkable propensity to massacre, expel, or persecute Jewish and Muslim minorities, as well as other Christian sects. Religious zeal fuelled the Inquisition for three hundred years, officially ending in late 19th Century. If the Church still had its previous power, would it have ended the Inquisition and acknowledged salvation outside Christianity, or even outside Catholicism? If the Catholic Church wasn't emasculated by Napoleon's separation of Church and State (followed by most countries), would it have acted so generously? Its humility developed only after political impotence. Power corrupts it, humility suits it.

The trend continued with Orthodox Serbs massacring Catholic and Muslim civilians. A Catholic bishop actively encouraged and participated in the Hutus massacre of Christian Tutsis. Neither seems to have been much restrained by their religion, the former considering religion as the basis for their different ethnicity even though Orthodox Serbs, Catholic Croats and Muslim Bosnians are racially identical.

The only major religion that from the beginning proclaimed salvation is available for other religions, has been Islam even though such claims are politically damaging to the interests of any new religion. Islam is the least discriminatory in race or colour, placing importance only on beliefs and actions, totally irrespective of race or colour. It elevates the brotherhood of believers above nationalism and race. (The Church of Latter Day Saints, developed over twelve centuries later, considers Africans are black as punishment for their sins.)

Christianity itself is not inherently racial, but Christians in the West have historically shown extraordinary tendency towards racialism. The US Confederates and the Ku Klux Klan regarded themselves pious Christians, sincerely believing in the fusion of racism with Christianity. Colonial powers felt the same. Where were the clergy at those times? They were preaching to black slaves and aborigines to remain humble, subdued, and submissive. (Kenyatta said Europeans had the Bible and the Africans had the land, then the Africans had the Bible and the Europeans had their land.)

Jewish perspective

Do Jews consider Judaism to be the only valid religion, and the Torah the only heavenly inspired revelation? The issue is avoided because difficult issues are confronted, and both outcomes give a lose/lose situation. If it isn't the only viable religion, they must consider the viability of other religions, including Christianity and Islam. Troublesome questions arise: if Jesus was sent by God, then the Israelites were guilty of the heinous crime of rejecting, persecuting and "killing" God's messenger.

Was he sent because they had strayed? If not, a prophet with a new philosophy wouldn't have been necessary. Why did Jesus reject so much inherited Judaic customs, which even after two millennia are still strictly adhered to? Why did Jesus condemn their clergy? Why did he attack the interpretation of their laws, by which they lived then and still do so today? Why did Jesus or John the Baptist never assist or support independence from Rome? No other Messiah was ever sent to liberate them from the Romans. By totally ignoring liberation from Rome, an obsession of the Pharisees, were Jesus and John condoning the occupation, or downgrading its importance?

Was the defeat of the Israelites by pagan Romans, destruction of their temples, and the ensuing Diaspora, punishment from God? Have they been so mistaken all this time and continue to be so today?

Consider the historical precedent. God sends a prophet with clear signs or miracles. He is rejected or killed; soon after the nation is punished or destroyed. Numerous instances are described in the Bible and Koran: Noah, Lot, Thamoud, Aad, Moses, Jesus, etc. Jesus said no two stones will be left standing, accurately and presciently predicting the destruction of the Temple, (NB: his prediction was written in the Gospels before the destruction of the Temple).

Jews consider themselves apart from the rest of mankind in a state of Divine favour, but then why have they been punished so severely? Either they are a chosen beloved people of great destiny, or like others are punished for sins. These issues are still little addressed today.

Israelis exhibit extraordinary levels of stubbornness in clinging to a racial state, disregarding the immorality of usurping Palestinian land by force, and expelling

its inhabitants through terror and premeditated massacres. Do Palestinians have the right to resist by force, or is this the exclusive right of Israelis? Relying on their vice grip on Western media and governments, they disregard the immorality of killing and evicting Palestinian civilians. They place more faith in guns and their influence in the West than in morality.

Their stubbornness has historical roots. Soon after Moses left the Israelites, they made an idol even though they knew this would infuriate him. Fabrication of the idol required considerable effort and material, even though they were short of these as impoverished refugees struggling to survive in the desert. Idols were more tangible and appealing than the invisible and forbidding God of Moses. (The Israelites persisted in fabricating idols for many generations later). One can only be amazed by their stubbornness. They knew perfectly well idolatry was the greatest crime that they could commit, yet did so only days after witnessing the greatest miracles of all time; the amazing plagues; a river turned into blood, parting of the Red Sea as they passed along the ocean floor with a mountainous wall of water held back breathtakingly on either side, and their stunning crash before their very eyes, drowning Pharaoh's army.

Though their faith was weak, their sense of humour wasn't. When at dawn the Israelites saw Pharaoh's army closing in, they asked Moses whether there had been a shortage of graves in Egypt that he had marched them all night to be killed in the desert. (Exodus 14:11.)

After delivery from Egypt, the Israelites came across a people who worshipped idols. They said to Moses, "Make us a god like their god." They could hardly have offended him more. Later they came across a strongly defended town, which Moses told them to attack. They replied: "You and your God go and fight. We will stay here."

Today, instead of looking towards God for protection, they look to temporal powers of wealth, control of the media, lobbies in Western governments, conspiracies, the King's ear, and the art of manipulating others to do their fighting for them.

In future they may look back and recognise their problems, which they are surprisingly incapable of doing today, just as idolatry was appealing to them then, but is no longer now. Today they act like Pharaoh, arrogant, tyrannical towards the Palestinians, ignoring their basic rights, exercising power against them with cruelty. They feel justified in taking massive revenge on innocent civilians; unrestrained by morality or the fear of God. They commit numerous war crimes and atrocities, and Western media barely criticise. Any criticism of their crimes draws howls of anti-Semitism protest (never mind the Palestinians are Semitic). Criticism of their atrocities draws more rebuke than the atrocities themselves, reflecting the degree of control they have on world media.

They should recall Jews prospered for fourteen centuries under Islamic rule. Not only were they not persecuted, but they enjoyed positive discrimination. Due to the animosity of the Crusades, Muslims cut direct trade with Christians and used the Jews as exclusive trade entrepreneurs between the Islamic states and Europe, a position they profited from for many centuries (see: History of the Arabs by John Bagot Glubb). Also after conquest of Andalusia (Spain), the Arabs remained as a fighting force and instead of settling down to political administration, they delegated this to Jews, from which they greatly benefited (and which became a cause of resentment for local Christians).

4:154 We took from them a solemn covenant. But they broke the covenant, denied the revelations of God, and killed their prophets unjustly. They said: "Our hearts are sealed."

In addition to the Primal Covenant, God has made other covenants with them and shown them more signs and warnings than others. On breaking these, which they often do, punishment is correspondingly greater. How else do they reconcile their position as God's favourites with Biblical scourges? The Israelites suffered catastrophic defeats by Assyrians and Romans. The utter destruction of their temples should demonstrate that piety and faith are more important than the bricks and mortar of temples and legal minutiae.

The Pharisees didn't see it that way, devising elaborate ceremony, religious trivia, legal nit-picking, and posturing of religious purity, (as clergy often do). Only the immaculately pure, the Pharisees, were allowed to enter the inner sanctum, holy of holies of the Temple. The poor and infirm were considered unclean and forbidden to enter any part of the Temple grounds.

Under the pretension of catering to pilgrims, they turned the temples into centres for usury, which Jesus described as "a den of robbers." He castigated the clergy in public for their pride, love of money, and lack of piety and humility. After public humiliation in the Temple, the Pharisees determined to kill him. Jesus knew perfectly well his attack on the Pharisees would bring fatal enmity, yet he didn't waver because the message was more important than his life.

The Israelites found difficulty in understanding Jesus' message. It implied they had strayed from God's values, whereas their foremost concern was political and temporal. Though they had considerable religious freedom, their main concern was liberation from Rome. This political objective had become more important than piety. Jesus' miracles should have demonstrated the verity of his prophecy, but surprisingly the Pharisees totally ignored them and the Jews soon forgot them. They continued to pursue political objectives, instead of spiritual; the trend continues today.

Palestine

There is barely affy dissent among Israelis about the oppression and atrocities committed every day against the Palestinians, who are either refugees unable to return, or third class citizens in their own land. Soldiers inside tanks shoot Palestinian children for throwing stones. Every day Palestinian civilians are killed, mistreated, abused, humiliated and condemned to deprivation and sanctions.

The objectivity of Western media is epitomised in the reporting of the incident where a child, crouching behind his father, was shot at for 45 minutes before being killed. Despite the broadcast of the video worldwide, it was reported as an accident.

The US and Europe give them billions of dollars every year to continue their brutal occupation. According to one estimate, support for Israel has cost the US one and a half trillion dollars so far, (equivalent to half a million dollars per person).

They have usurped Palestinian land, committed atrocities, condoned torture, extra-judicial killings, destruction of homes of innocent relatives, massacred civilians, and used banned cluster bombs and white phosphorus. The unjust state they have created is the most oppressive and racist in the world yet is fully supported by the West in everything it does.

They don't need God so long as they control American politicians, but their claim to legitimacy is based on religion.

Palestinians have lived in Palestine for at least two thousand years continuously. Genetic evidence suggests Palestinian ancestors were Jews who had converted. Some diseases that have abnormally high occurrence in Jews are also prevalent in Palestinians. If DNA comparison shows that Palestinians are genetically closer to Sephardics than Ashkenazis, Jews can hardly justify claims to the land, especially since they haven't lived there for two thousand years.

There are two claims of legitimacy. Firstly the Bible; if they are prepared to kill or traumatise millions of innocent peaceful people and violate their rights and dignity on the basis of a few lines in the Bible, then Zionists and their Christian supporters should strictly observe every other claim and commandment in the Bible, especially those that don't involve inflicting suffering on others, such as fasting, the Sabbath, alms tax, etc. They refer to a few lines to justify oppressing millions, but ignore the rest of the Bible. Like Pharisees they strain at a gnat and swallow a camel.

They must accept every verse in the Bible as absolute truth, including the hundreds of absurdities. They must accept verses in Revelations, not figuratively, but literally. Supporters of Israel must accept passages that say only 144,000 souls will be redeemed from earth, exactly 12,000 from each of the tribes of

Israel (Revelations 14), the rest inevitably going to Hell, however good they have been. By the way, all these 144,000 were celibate men who had not defiled themselves with women. Anyone who has committed the crime of marriage, had children or is not among the top 12,000 of the twelve tribes is damned. The rest might as well pack it up. NB: there are no women among these 144,000 saved souls.

If all is settled, why was Jesus sent? No one else is going to be saved anyway, which contradicts a basic Christian claim that God so loved the world that He sent His son. If He so loved everyone, why only 144,000 places allocated for Heaven and billions to Hell. With billions of adherents, thousands of priests and scholars, two thousand years of experience, one would hope basic precepts would have been sorted out by now. Blatant contradictions are used by Ditchkins to heckle and mock its philosophy.

In any population perhaps ten percent say are hard core unbelievers even if shown miracles. About ten percent are believers whatever buffeting they get, which leaves about eighty percent who can float either way. The foremost duty of clergy and scholars is to draw this group to the right side. Yet look at the situation; Catholics debate whether to allow child molesters to continue to be priests and bishops; Protestants debate whether to allow homosexuals as priests; and demagogic televangelists whip up hatred and intolerance, funded by millions of dollars from Jewish groups for supporting Israeli policies. They are developing into the same passionate politicised clergy they abhor in the medieval Catholic Church. And basic precepts remain unexplained.

Established Christian clergy have lost sight of the way and the sheep have noticed. Secular society determines values for the clergy.

Insistence on the inerrability of the Bible is untenable in the Age of Reason and can only damage its credibility.

Revelations 13 And I saw the beast coming out of the sea. He had ten horns and seven heads, with ten crowns on his horns, and on each head a blasphemous name. The beast I saw resembled a leopard, but had feet like those of a bear and a mouth like that of a lion. The dragon gave the beast its power and his throne and great authority. One of the heads of the beast had a fatal wound, but the fatal wound had been healed. The whole world was astonished and followed the beast. Men worshipped the dragon he had given authority to the beast, and they also worshipped the beast and asked, "Who is like the beast? Who can make a war against him?"

Such verses make Greek mythology look like historical facts. Unabashed by such verses, some US televangelists claim to have discovered their secret meaning. Each horn represents a monarchy; the lion is Britain, the bear Russia etc.

Why are important revelations from God so archaic, crude, and tortuously cryptic, only decipherable after two thousand years by a TV minister (who commercially exploits it)?

Actually, scholars believe the verse is cryptic reference to the abhorred Roman Empire, written at the time of Nero, who ruthlessly persecuted Christians, thus the need for cryptic language. (666 is the numerical equivalent of Nero's name).

To take a single line from among the thousands that are absurd, contradictory, and flawed in the Bible and on its basis justify killing, impoverishing, abusing, and humiliating millions of innocent people, evicting millions more from their homes, and expect all Muslims to acquiesce submissively and refrain from protest is like many of the verses, absurd.

The second potential source of justification for the state of Israel is the precept "might is right", in which case those fighting them are not terrorists but combatants. Though their attacks are mere pinpricks, there may come a time, if a just settlement and right of return of refugees is not granted, when formidable force will be used.

The Jews rely on material strength, ignoring the power of God to avenge injustice and oppression. Has He not done so in the distant and recent past? Will He never do so again? Are we absolutely sure Alexander, Genghis Khan, Tamerlane, and Hitler were all accidents of history? Why do Jews, who lived in peace and freedom for over a thousand years under Muslim rule, behave like racialists and tyrants now they have the upper hand?

Hardly any Jewish group protests the oppression of the Palestinians. In the 1970s tiny demonstrations demanding the right of Jews to leave the Soviet Union got daily coverage in the West. Compare that with the mute coverage in the West for the British girl who stood in front of an Israeli bulldozer to prevent it demolishing a Palestinian home, and was deliberately crushed to death, an act of indescribable barbarity; another British human right activist in Palestine was deliberately killed by an Israeli sniper. The feeble reporting of these in the West shows the vice-like grip of Jewish control on the press, like a rat frozen by the stare of a python.

Why does the West disregard the plight, oppression, massacres, torture, and deprivations of the case of Palestinians,? Especially since they know that in doing so they antagonise a billion Muslims who have supported them and taken their side in various wars and struggles of the 20th Century. A cabal of pro-Israeli Jews is insidiously pressuring them to act in Israel's interests, even though it conflicts with the interests of the West. Many strange conspiracy theories persist, staged moon landings or communication between the US government with aliens, yet the media is loathe to mention the conspiracy to control Western politics and media by the Jewish cabal (precisely because it is so).

It's time the US acted for its own interests and stopped its unconditional support for Israeli atrocities. Though they are prevented from seeing it by the Jewish controlled press, each crime committed by the Israelis against the Palestinians reflects badly on them; every pain inflicted by Israelis and supported by the US increases enmity against them. Resentment, bitterness, and the general inability to retaliate will lead to a critical threshold.

Muslims were not as appalled as Americans on 9/11. They have noticed how indifferent Americans always are to the thousands of innocent Palestinians killed every year by Israelis; their population is a hundred times less. Do Americans react with horror to these murders, even though many of the victims are children? Are they aware of the grief they cause? Not only do they not condemn it, but prevent others in the UN from doing so, (by 2008 the US had used its veto 40 times so far to prevent condemnation of Israeli atrocities). Their amazing indifference means either they are callous to human suffering or brainwashed by Jewish propaganda.

What would Western opinion have been on 9/11 if three thousand Western lives had been saved instead of lost? Would it have reacted with gratitude in equal measure? Would it have been as determined to nation building as it had been in nation destruction of Afghanistan and Iraq? What would the reaction have been say, if a group of Muslims had saved a hundred thousand Western lives? Surely the West would undoubtedly show immense gratitude.

Yet this is exactly what happened. Hundreds of thousands of Western casualties were saved by Arabs in WW1. In return they were treacherously cheated by the West in the Treaty of Versailles. Instead of reward for their sacrifice and for saving tens of thousands of Allied lives, they were compensated with the cancerous scourge that has caused immense suffering. The state of Israel was the reward given to the Arabs in 1917 and Versailles for fighting the Axis powers in WW1, for defeating their fellow Muslim Turks, who till then were unbeaten. The main engagement between the Allies and Turkey in WW1 in Gallipoli resulted in the thrashing of the Allies, who suffered hundreds of thousands of casualties. The defeat was so great that Churchill was obsessed by it till his death. (According to his private doctor Lord Moran, Churchill fantasised of victories he could have had with Turkish soldiers under his command. NB: Gallipoli was his brainchild, one of numerous blunders that all ended in disaster).

It was not in the interests of the Arabs to have fought for the Allies. If the Germans had won, they would have suffered for it. If the Allies won, they would have attained independence from the Turks anyway. They unnecessarily engaged a formidable power, an undefeated army, for the benefit of the Allies duped by the fanatic Lawrence (who worked for British Intelligence and who considered England's greatest enemy was France). The outcome for their valiant efforts was change of colonial rule from Muslim to Christian, and the establishment of an alien Jewish state. In the Treaty of Versailles, the Allies cut up the Ottoman, German, and Austria-Hungarian Empires among themselves as spoils of war. Not only was nothing given to their Arab allies, but Arab land was "given" to Jews. One wonders how Europeans would react if Belgium say, having fought against the Nazis, were given over to the Arabs as a national homeland in Europe.

The West can't understand why Muslims feel wronged or resentful. Palestinian land was treacherously usurped by the West, which continues to arm Israel to the teeth, and insist Palestinians accept the status quo and stop causing trouble for it and ignore the travesty imposed on them. Its sordid details are still deliberately ignored or suppressed. Any criticism of Israel draws tired cliched howls of anti-Semitism. The affront to morality is blatant and odious.

Zionists place greater trust in their cabals and conspiracies than in God. They remain oblivious to Jesus' admonishments of compassion, love, and forgiveness. They don't see their barbaric treatment of Palestinians, but are sensitive to any verbal slight against themselves.

A historical lesson for them is how such blindness was instrumental in unleashing the ravaging forces of WW2 against them. Was such a Biblical-scale scourge on Jews ordained by God? Doesn't it resemble similar examples in the Scriptures and history, such as Alexander's destruction of the Persian Empire, Roman sacking of Judea, the destruction of Pompeii (the sin resort of the Romans), campaigns of Mongols and Tamerlane, Spanish devastation of American natives?

Holocaust background

A strange connection exists between the Balfour declaration and the Jewish holocaust, yet is hardly considered. A review of the end of WW1 without the blinkers of the victors is in order. Many consider the causes of the war diffuse and mysterious and many have no idea what it was about and what caused sophisticated European nations to try to annihilate one another, and where they got their furious energy to do so.

The extraordinary motivation and the focused energy of one man dramatically changed the course of world history; a triumph of the will of a single mind, without it there would not have been WW2. To analyse the causes of the war, one must evaluate the reasons that motivated this one man and ignore the overflowing slush from the victors of how incredibly evil the Nazis were, and how incredibly good they were. Considering the vast damage caused by the war, it is amazing how little the actual motivation is analysed.

Two great mysteries from that era should first be addressed. What happened to Kaiser Wilhelm II? Having instigated the war (victor's view) not only was he not punished, but was allowed to go free and not a word mentioned thereafter, whereas after WW2 many German and Japanese leaders were executed. During the war a major demand had been: "Hang the Kaiser." What happened to change this?

Another great mystery: what exactly was Hitler's motivation for the Final Solution? It is strange how little is known about the actual motive, for which Palestinians continue to suffer. He was not insane. To say he was evil explains little and raises more questions. If he hadn't killed Jews and had conquered

Britain or made peace with it, he would have become one of the greatest figures in history, surpassing even Napoleon, This is incompatible with an evil monster, because he was the same man. Stalin, Saddam, and Pol-Pot arguably were more evil, The degree of evil is not simply the sum of damage caused, but depends on the degree of wickedness of the individual. (NB: evil is a religious term; the secular interpretation is relative and changes with time and culture.) There are many evil persons about. Many don't have the power or opportunity to show their evil nature. If Saddam was a grocery shop manager, he might have led an ordinary, even respectable life. He would still have been the same man.

One can't say evil is a product of environment. Of all entities and life forms, only humans can be evil, Our tendency to good or evil is based on free will and conscience, Evil is based on morals based on religion, The local grocer may be evil and a much less evil person may cause tremendous loss of life and property damage, like George W, Bush who considered himself a good person but personally caused the violent death of over a million innocent civilians.

Some may say the insurgents are to blame as they did most of the killing, but that is specious and false. The Americans through evil or incompetence destroyed all the institutions responsible for law and order which then allowed the mayhem. An analogy is deliberately destroying a patient's immune system then blaming bacteria for his death. (The Americans also destroyed power stations and water treatment plants totally unnecessarily thus causing the deaths of many others).

Malaria has been the greatest human killer and insects eat much of the world's food crops; they are not evil even though they inflict tremendous suffering and death, Genghis Khan is not hated in the West, but is detested in the Middle East where he did his damage, and revered in Mongolia and Central Asia. The reason why he is not hated in Western Europe, and why Hitler is not hated in the Asia, is that they did little damage there,

Hitler almost made peace with Britain, in which case diverting his forces east, he might well have succeeded in conquering the USSR, destroying Communism, and ending Stalin's terror. This might have won him many supporters, including America. If he had brought prosperity to Europe and Soviet countries, the way he spectacularly succeeded in doing for Germany, he would have become perhaps the greatest figure in history, especially as there was no stopping him taking over much of Asia and Africa as well.

Preliminary steps for peace negotiations between Britain and Germany were taken soon after the catastrophic defeat of the British and French. It is hardly credible that it was done without Churchill's approval. When Churchill was told that Hitler's deputy had landed in Scotland and was arrested, his only response was that he was going to watch a film.

This astonishing response suggests he was aware what was going on knew that the plan could have gone awry; that there was little else he could do now and all he wanted was to divert his attention from the disaster. Open negotiations were out of the question; it would have weakened the will for resistance, as well as contradicting his war rhetoric. As previously envisaged in their plan B, if it went wrong, all would be denied. If he had known nothing about it, he would not have been so nonchalant to the news that the deputy leader of the conqueror of Europe and imminent invader of Britain had just dropped by.

The Germans were invincible, the Americans neutral; peace negotiations were a sensible, if not only, option. Britain and its thrashed army didn't have a chance to succeed on its own. It could aspire for better conditions than the liberal autonomy granted to Vichy France. It had good contacts with the Germans especially among the aristocrats and Hitler had a weak spot for them.

However plans were wrecked by the pivotal event of Hess not finding the Duke of Hamilton's private runway. Despite the rigorously enforced blackout, witnesses had seen the landing lights switched on. His capture by local militia before the Duke could arrive forced the British government to distant itself from any insinuation of peace negotiations. They then propagated the myth that Hess was insane. The plan had been for Hitler's deputy to begin negotiations with a senior representative of the British government and report back to Hitler on Britain's conditions for peace; also how and where the negotiations were to continue (in Portugal).

The Germans generally respected British aristocracy, (who were basically German). The Duke of Kent had been a strong supporter of the Nazis and the abdicated king Edward VIII was living in France. But their influence was overestimated. Hitler had always shown affinity for the English, fellow Saxons, and would have been happy to make peace with them to divert his forces towards his real objective: the vast lands and resources of Russia and East Europe and to crush Communism, which is why he sent his right hand man alone and unarmed on such an otherwise astonishing incomprehensible mission.

Hitler's private secretary wrote in her diary that the only time he saw Hitler depressed was when he was told Britain had declared war (see Appendix 3). Hitler's affection for the British was not damaged by mutual platonic love with Unity and Nancy Mitford in the 1930s.

Had Hess found the runway, a peace deal would have been very likely and imminent, changing the course of the war, but it would not be a determining factor whether Hitler was evil or a great statesman. In both cases he was exactly the same person.

At least two of Israel's Prime Ministers were directly involved in massacring innocent unarmed civilians, but were treated with respect by the West (one with a Nobel Peace Prize).

By Western standards whether one is respectable or evil depends on the amount of influence in media. Fortunately on the Day of Resurrection we will not be judged by humans with their perverse justice, swayed by influence peddling and politics. This is lost on Jews, who forget there is a greater power than Western public opinion, which is why they don't trouble themselves with the morality of oppression and massacres. So long as they have the public opinion of the West, they have little to fear. The one remaining bulwark in their way is Iran, a focal centre for their eventual checkmate.

Hitler was the most influential man of the 20th Century, even more than Stalin for several reasons; firstly few had a truly global, all-encompassing, long lasting impact. Secondly, no one else made so great an impact solely on the basis of his personality and will power, rather than use of an existing power structure. He created both the ideology and driving force for the war, whereas Stalin used an inherited ideology and power base.

Despite Hitler's enormous influence, many would be stumped to explain his motivation. Any mention of him draws a routine four-legs-good-two-leg-bad bleat of "He was evil." Instead of a rational analysis of his motives, a primordial dread persists in the West that any opinion expressed about him, other than "He was evil", will inevitably lead to rehabilitation and resurgence. Thus they remain in ignorance.

Many in the West criticised the American policy of attacking Iraq to get rid of Saddam on the grounds that weapons of mass destruction were not found. It implies they accept the invasion for preventing the weak probability of such weapons being used against the West, but not for saving the Iraqi people from oppression from a cruel tyrant. The fact that millions of Iraqis suffered as a direct result of the war through lack of basic services, water, power, the lack of safety for people or property etc. has not drawn the same amount of criticism. But Saddam was more evil than Hitler, and had he had the immense forces of the Third Reich at his command, would have done much worse. At least Hitler didn't personally murder anyone with his own hands or participate in tortures or use chemical weapons.

Any analysis on Jews would be incomplete without mention of Hitler's motivation. A brief look is beneficial.

Hitler

Born into respectable middle class, he was close to his loving mother, who died of cancer while he was a teenager. He became a passionate quintessential young Bohemian in Vienna, capital of the colourful Hapsburg Empire, where as an artist, he scraped a living by selling his paintings. For his passion of Wagner, he saved money for symphony concerts by living on bread and water for a week at a time to purchase standing room tickets.

The Bohemian student fell utterly and passionately in love with a girl he barely talked to. He was in seventh heaven on the days she smiled at him and in the

depths of depression when she didn't. This lasted for several years while she probably had little idea what was going on (or how great an effect she may have had on world history if she had managed to dissipate his intense passions). Interestingly, her family name was Isaak, a probable Jewish name. He didn't know whether she was Jewish or not, though in fact she was Christian, but it shows at this stage, he was indifferent to Jews.

The classic Bohemian tried to evade military conscription, but as soon as war started, he immediately volunteered and spent the whole four year duration of the war at the front lines. Wounded several times, he received Germany's highest decoration for bravery, and was promoted to corporal. After the war, his extraordinary skill in oratory at political rallies led him into politics, became head of a party, and eventually was democratically elected as Chancellor, where he achieved astonishing success, delivering the nation from the world's greatest economic ruin and transforming it to world pre-eminence while the rest of the world floundered in a relentless economic quagmire that lasted for decades.

The Bohemian lifestyle was a perfect setting to instil idealistic values, free from materialistic distractions, trivial entertainment, and pass-times. What exactly was instilled we don't know, but it wasn't an idle period. As well as being an artist, he was a passionate lover of classical music. He knew all Wagner's works by heart; a truly extraordinary achievement as it was without recorded music; Wagner's music isn't all the catchy or humming type.

He became so aroused by his music that after every concert he spoke passionately for hours to his roommate about every detail of its interpretation, often berating the conductor for his shortcomings, compared to the brilliant rendition he had in his head. One wonders how many people today know all Wagner's works by heart, note for note, or any other composer for that matter, without the aid of recorded music, simply by attending live concerts (standing room only). Wagner himself may not have memorised all his works by heart, which shows the amazing intensity of emotion Hitler possessed.

Saddam's formative years were spent barefoot and neglected except when beaten by his stepfather. One can't help wondering if anyone weaned on Dickens in their formative years could become a murderer or a tyrant. Surely few can resist the influenced of the power and eloquence of his portrayals of misfortune, injustice, and the oppressed. Conversely it may be that an evil nature does not respond to these. (This would make an interesting research topic; the degree of exposure that murderers have had to say Dickens in youth in childhood). More people in the West derive their morals from the media than from the Church.

Whereas Saddam was psychologically damaged by his early problems, Hitler suffered no such abuse. An impecunious bohemian lifestyle can hardly account for his later actions. If anything it was normal. Besides, everyone suffers in some way in childhood, including Dickens himself. When his father was sent to debtor's prison, he was taken out of school and put in menial labour at a shoe

polish workshop. His soul was crushed by the enormity of the perceived iniustice, neglect, and shame. It haunted him for the rest of his life. In his later vears, reading the veiled account of these events in David Copperfield made him cry; such were the intensity of his feelings. He divulged this only to his friend and publisher. In the despair of ever becoming a gentleman, he found escape in books. His spirit soared in the adventures of Aladdin (he could relate with his misfortunes), and the fantastic stories of the Arabian Nights etc., which he devoured, rereading them many times over, (there was limited literature specifically for children early in the 19th Century). It was in these wonderlands that his soul found refuge and gradually retreated. When he went back to school, his passion for literature remained. It also inspired a vocation in literature. Though the blacking factory experience was hard on him, not only did it not make him a worse person, but it proved to be for the immeasurable benefit of mankind. It gave him a secret energy and an exquisite sense of compassion to social injustice. Had he been sent to a splendid public school instead, he may have developed into a middle class snob and died in obscurity. The world would have been a poorer place for it.

Hitler's Bohemian idealisms were not tempered by books or films, where he might have empathised with the plight of others. He may have been influenced by Nietzsche. Historians search exhaustively in vain for psychological scars. Some speculate that his hatred of Jews developed from contact with them, for instance as art dealers, but this is pure baseless conjecture.

Life expectancy at the front was six weeks. His phenomenal survival despite his bravery planted a feeling of destiny. He later alluded to this, though he didn't know in what field it was to be. The non-compromising idealist with a sense of destiny wasn't sure what the ideal was or where his destiny lay, but both came to him dramatically with the force of a bombshell.

Hitler was blinded for several months by mustard gas. (If any chemical can be evil, mustard gas is it. It burns the skin on contact and prevents blood vessels reaching the wound to heal it, causing chronic festering wounds that are notoriously slow to heal. Also intense sensitivity develops with each exposure. It was so horrible that Hitler, having personally experienced it, never used chemical weapons in WW2).

The Allies in WW2 had the same arsenal of chemical agents they had in WW1, but unknown to them the Germans had developed and mass-produced phosphorus based nerve agents, which were to mustard gas and chlorine what a modern fighter bomber is to a piston-engined biplane. If he had used them, he would have wreaked havoc among the Allies. Saddam showed no qualms in using them; he would have readily used it to annihilate millions more to save himself.

After four years of unspeakable suffering at the front, in the dreadful darkness of his blindness, the news of the unconditional surrender of Germany came as a devastating blow. It is difficult to over emphasise the shock and its effect on him.

The German Army was firmly entrenched deep in France and Belgium, not on German soil or even near it. The Germans had inflicted more casualties on the Allies than they had suffered. They were holding on strongly with no signs of retreat. The total number of German military killed in WW1 was less than 1.8 million while the Allies had 4.5 million killed (also 1.1 million Austria-Hungarians.) The Germans had fought well and militarily were not losing, and Hitler knew it from his vantage point at the front. At worst it was a stalemate.

The news was absolutely crushing, but even worse was to come. The Allies imposed enormous punitive reparations, which destroyed the economy and caused immense hardship. The French, unhappy with the rate of payment, in total disregard to the sensibilities of the Germans, occupied the Ruhr Valley. The German spirit was humiliated, sacred nationalism battered, and the Fatherland for whom he had fought so hard was ravaged. Remember this was in the age of intense nationalism. Though Germany sunk into grief and resignation, Hitler refused to acquiesce or keep quiet. He was shouting from every corner and in every beer hall.

His immense capacity for passion was now channelled from music, romance, and art to a single cause; the gross injustice and treachery of the Armistice. He plunged into this not as a calculated career move, but by the uncontrollable power of his emotions. Miraculously, it transpired that he was a brilliant demagogue, among the greatest ever. He won over millions of followers solely by the power of his speeches. These converts were not semi-literate or simpleminded, but the most sophisticated and cultured people in the world. Berlin was the cultural capital of Europe before WW2. The stunning effect of his speeches illuminated his vocation. Here was his destiny.

The famous architect Albert Speer wrote in his memoirs that he had heard about the upstart Hitler, and decided to go to one of his speeches to see what the ranting and ravings of this madman were about. He said by the end of the speech his body and soul belonged to Hitler and he had become a Nazi convert, devoting his life to the cause. Millions of others felt the same. He aroused the resigned, despondent Germans from the stupor of their capitulation, eloquently exposing the abuse and injustice of the punitive damages. He rallied the potent force of German nationalism, never far below the surface, in the peak age of nationalism.

He intuitively recognised (or invented) the value of the dramatic display of authority for the German psyche; the banners, symbols, uniforms, regimented rallies, torchlight parades with searchlight backdrop, brilliantly orchestrated by Hitler with Teutonic efficiency and flair to great effect. Remember these were unprecedented innovations, reflecting another of his many amazing natural intuitions. He marshalled the latest technologies to add to their stunning effects, searchlights, microphones strategically placed above the crowds, loud speakers to amplify and reinforce the chanting, use of radio and television to broadcast the stunning images and sound.

A powerful force working for him was the devastating hyperinflation and economic ruin inflicted by the Treaty of Versailles. Astonishingly, Hitler's economic policies revived the economy, demonstrating another example of his amazing intuitive genius. The West didn't manage this till decades later after the war, and even then by accident.

The greatest advances in science that the world has ever seen or will ever see again, that dazzled awestruck mankind by its brilliance, were made by German theoretical physicists in the 1920s. It is truly astonishing that many of these physicists were actually starving from lack of food. One is reminded of the quip that 400 years of peace and prosperity in Switzerland produced the cuckoo clock, while many of the greatest advances were at times of war and great upheaval: Aristotle, Archimedes, Michelangelo, Leonardo, Mozart, Beethoven, and Einstein; all produced their stunning works during great wars (Archimedes was allegedly killed in the middle of a calculation.)

Hitler possessed an extraordinarily powerful intuition. Without training, self-help books or the benefit of a tutor or role model, he naturally deduced all he needed to know in his many fields of expertise, including oratory. He converted millions through the power of speech with an uncanny ability to mesmerize his sophisticated audience.

When he decided to build a people's car, his intuitive genius produced the greatest success in automotive history. The same car he produced is still being made well into the 21st Century, the most successful car of all time. The name he chose for it is a household name throughout the world. (Its sports derivative, with the engine still in the back, became the world's most successful sports car.) The engineer he personally chose to design it was the greatest in the history of the automobile, Dr. Ferdinand Porsche. If the widespread use of hybrid petrol-electric cars is realised by 2012, it will be a hundred and ten years after Dr Porsche's first production.

Hitler invented the dual carriageway autobahn, later copied by the rest of the world as an icon of national advancement.

He realised the power of propaganda of films and produced an all time classic: "Triumph of the Will", for which he personally picked Leni Riefenstahl as director, an unknown 20 year old, who is regarded as one of the greatest directors ever.

Hitler's economic policies were so successful that Germany was the first country to come out of the worldwide depression. It was the only country to do so before the war. America didn't manage it till the middle of the war and the rest of Europe by the late 1950s.

The General Staff advocated a modified Schlieffen Plan to attack France in a flanking movement through Belgium, as in WW1. Only one general of the 30 or so General Staff, von Manstein, proposed a different, radical plan. Hitler's

uncanny intuition immediately chose it against the advice of the remainder of his generals who advised against it; the result of which was the amazing and crushing defeat of the combined French and British in a few weeks, brilliantly out-generalling them in one of the greatest victories of all time. The Allies outnumbered the Germans in manpower and tanks two to one. It was due to his genius intuition, not his military experience as corporal. (The British and French are so humiliated and pained by it that they refuse to dignify the battle with a name.)

He was a pioneer of Blitzkrieg, which in a flash made most of the cumulative knowledge of world military expertise obsolete.

He pioneered the airborne paratrooper Commando force, which brilliantly rescued Mussolini from imprisonment, inspiring the formation of the SAS and many others like it.

He was a vegetarian, many decades before it became fashionable. Numerous other instances abound of his amazing brilliant intuition.

The same intuition told him Germany's capitulation in WW1 was a heinous betrayal of the Fatherland. Someone had treacherously stabbed it in the back. The Germans still had the upper hand on the battle field. Allied losses were greater. The front lines were deep in France and Belgium. The Turks had given the Allies a thrashing in Gallipoli.

Alexander Haig, the Supreme Allied Commander, wrote in desperation to the Prime Minister to open peace negotiations with Germany a few weeks before the surrender. (from the book "Douglas Haig and the First World War" by Dr J.P. Harris [2008])

Unconditional surrender was totally unjustified; there must have been a treacherous conspiracy, but who was to blame? He soon found his culprit; the Jews.

Jews held senior positions in the German and British governments. Notably Lord Balfour's deputy was an active Zionist Jew. Patriotism to their host country was less than their allegiance to Zionism. Through secret arrangements, Jews on both sides conspired for the surrender of Germany by feeding false information to the Kaiser on the prospects of the war and the imminent collapse of Germany's resources and food supply. In return the Allies would spare the Kaiser, among other concessions.

The price for this was the creation of the state of Israel. The signal to the German Jews to execute their side of the deal was the Balfour Declaration. Zionist Jews on both sides valued a Jewish homeland more than allegiance to their host countries. Why else was this declaration made at the very strange date of 1917, when the Allies had suffered immense losses, long before the outcome of the war was known, especially since it would pointlessly alienate Arab allies? Was this not a time to reward the Arabs for defeating the Turks, which the Allies had been

unable to do? This could even have driven the Arabs towards the enemy. What other motives could there have been? Why did the British government make such a potentially damaging policy proclamation, which it could not implement till well after the cessation of hostilities, years away? The outcome of the war was still far from resolved and could have easily gone the other way.

Was it a coincidence that Balfour's deputy was an active Zionist? Have Jews in general shown themselves to be incapable of conspiracies, especially when in influential positions (as in the Jewish owned think tanks working for the US government that even before 9/11 advocated the US attack Iraq)? If the Kaiser was directly responsible for the war as an absolute ruler, why was he let off without a word, but the whole German nation was mercilessly pummelled with reparations and sanctions? Was the responsibility with the Kaiser or with the people? Compare his lenient treatment with the dozens of senior officials of Germany and Japan who were hanged after WW2 for following orders.

After capitulation, Germany slid into an economic abyss. The enormity of the depression disintegrated the fabric of society. Life savings disappeared; ancestral properties were sold for trifles, and many faced hunger, but during those times, the Jews benefited. Hitler must have noticed their acquiring property cheaply from traumatised German folk. His unfailing intuition found evidence for the treachery. This could explain his sudden hatred of Jews, which he came to consider as parasites. His hatred of Jews was based on his intense nationalist love for his race and Fatherland, whose dignity if not existence he felt were threatened by Jews.

Evidence showing his prime motivation was love of race and country is that in addition to Jews, he tried to get rid of all other non Germanic communities, such as harmless Gypsies, of which about one and a half million were killed. He considered them parasites also, even though they caused little damage; ditto for homosexuals (about 100,000 killed) and mentally handicapped (about 275,000). His love of Germanic folk and the threat to them by Jews was the motivation to get rid of them. Treachery in times of war justified drastic measures.

The motivation of revenge for treachery in times of war is still little appreciated in the West, which simplistically regards Hitler as frightfully evil.

The Jewish controlled Western media cannot even discuss such matters. They fear is that understanding Hitler will humanise him, whereas they have demonised him to an unrecognisable state, incompatible with his undoubted genius.

Where exactly did the extreme philosophy of Nazism come from? Firstly, it originated from Western culture, which elevated nationalism to sacred sanctity, in the service of which no endeavour was too great, for the benefaction of which human life was a perfectly acceptable sacrifice. From the 17th Century it supplanted religion as the most powerful social force. Interestingly much less of

this existed in the Far East, except Japan, and little in Islamic countries, which is averse to nationalism.

Nietzsche rejected morality with its foundation on religion and proposed in its place the pursuit of perfection through will power and strength, reasserting one's control over destiny.

Nietzsche is still influential in Western philosophy, but what are the boundaries of evil? Weren't Nazis supreme in every field? Didn't they conquer Europe in an astonishing short time? Wasn't the Nazi's meteoric rise evidence confirming Nietzsche? The Final Solution wasn't made known to the public, because they weren't ready for it. Remnants of Christian morals still existed. Like the bizarre creed of the upper echelons of the Freemasons, the brave new theories of Nietzsche were considered too advanced for laity.

When Nietzsche replaced religious morality, Nazism arose, yet today an unholy alliance of secular humanists and atheists are trying to rehabilitate him, portraying him as misinterpreted by the Nazis. They are scraping the barrel for figureheads to rally around to confront the rise of religious fervour.

Consider the major slaughters of the 20th Century. WW1 was caused purely by unrestrained European nationalism, resulting in 20 million deaths. WW2 was a direct reaction to the First, with more nationalism with a dose of Nietzsche, resulting in 50 million deaths. Atheist communist pogroms, deportations, Gulags, etc, caused 50 million Russian dead. As a direct result of Japanese Imperial nationalism and colonialist ambitions 15 million Asians died. Under Mao Zedong, between 45 and 72 million Chinese civilians were killed. French colonialists killed 1.5 million Algerians. Soviet invasion of Afghanistan to liberate them from religion and enlighten them with socialism caused 2 million Afghanis killed. The Khmer Rouge's attempt to form a model communist utopia killed 2 million. All these were caused by secular atheistic anti-religious creeds and nationalism.

The Nazis are condemned for their treatment of subjugated peoples, for segregating them based on race, for imprisonment without trial, state condoned torture, extra judicial killings, civilian massacres, massive over retaliation as deterrence, concentration camps, and ghettos. But Israel is guilty of every one of these crimes. The only difference is that the Nazis committed these in their own lands in times of war, while the Israelis in illegally occupied land. It is astonishing how blind and ignorant the West is and how detestable its double standards. They condone the use of force against Palestinians, but condemn the use of force in return. Their hypocrisy and double standards are odious and nauseating for all decent humans.

Did the British bomb Catholic areas of Northern Ireland, shell villages in Ireland for harbouring IRA suspects, blockade Catholic communities to starve them, massacre civilians, torture suspects, demolish their relative's houses (with twenty

minute notice)? Yet through perverse travesty of media crooked-speak, many consider Israel to be a democracy comparable to Europe.

It is the duty of all Muslims to support the Palestinians, as well as any other oppressed Muslims, to liberate them from injustice and oppression. They will certainly not escape the punishment of God for their crimes, just as they haven't in the recent and distant past. Martyrs will be rewarded with ample time to watch their Israeli oppressors burn in Hell. Both Americans and Israelis are smug behind their massive armaments, but these will have little use as they burn.

The Nazis taught the world the danger of humiliating a proud nation; thus American leniency towards Germany and Japan after the war, resulting in strong lasting friendships with them. The Nazis taught future generations an important lesson about world peace, but the message is lost on the US in their dealings with the Arabs, constantly denigrating them for the benefit of the Jewish lobby. Israeli intransigence, by antagonising a billion Muslims is contributing to destabilising the world.

The Nazis were the modern equivalent of the Assyrians.

The Stormtrooper came down like the wolf on the prey,

And his Panzer was gleaming in silver and grey.

And the sheen of his armour were like the stars of the sea,

As the waves roll nightly on deep Galilee. (after Byron)

Historical Influence

One would imagine that having usurped Palestinian lands, Israelis would try to win over their new neighbours with friendship, assistance, political or financial concessions, or somehow to make it beneficial for the Arabs to have them in the region for the sake of peaceful future cohabitation. Instead they have shown amazing enmity and hatred as if it was the Palestinians who had usurped their lands and Arabs had persecuted them for centuries. With faith only in their guns and backing of America, they continue to antagonise Palestinians and Muslims with extraordinary arrogance.

05:82 You will find that the most implacable of men in their enmity to the faithful are the Jews and the pagans, and that the nearest in affection to them are those who say: "We are Christians." That is because there are priests and monks among them; and are free from pride."

The Arabs should view American policy for what it is: a dog on a leash controlled by the Jewish cabal. It is not the dog that is the real problem but the owner controlling it. Attacking battle tanks with Kalashnikovs is futile. The same tactics are used in politics. Instead they should aim for the tank commander.

The battle should first be engaged in the courts and the media. The White House and Capitol Hill can only follow these. It is where the Israeli lobby have

concentrated their forces. Arab freedom fighters attacking American targets are assisting Israeli interests. Jewish cabals have a lot of experience in political influence peddling. They have a natural historical propensity to go straight for the king's ear; like the Doberman that goes straight for the throat, whereas other dogs go for arms and legs.

The earliest example of their expertise in this area is Jacob stealing the birthright from Esau by covering his arm with goatskin and pretending to be his hairy brother. Even more successful was Joseph, winning Pharaoh's confidence and becoming the Egypt's second most powerful man. With history like this, the Jew knows by training to go straight for the king's ear.

During the reign of Xerxes, a Jew called Mordecai was working at the palace in Susa as an official of the king's gate. He cleverly contrived for Xerxes to marry his beautiful niece Esther, following a tiff between the King and Queen. An influential nobleman at the court, Haman, had arranged for the total annihilation of the Jews, (one wonders how the Jews manage to elicit such hatred on themselves). An edict written by him and signed with the king's seal, which had been at his disposal, was sent to all the provinces of the Persian Empire:

Esther 3:13 "...with the order to destroy, kill and annihilate all the Jews, young and old, women and children, on a single day, the thirteenth day of the twelfth month, and to plunder their goods."

Esther 4:3 In every province to which the edict and order of the king came, there was great mourning among the Jews, with fasting, weeping and wailing. Many lay in sackcloth and ashes.

Using womanly ways, she managed to get the edict repealed by Xerxes, Haman hanged, and his estate given to Mordecai. The event is celebrated annually as a great holiday in the Jewish calendar. The value of going straight for the king's ear is ingrained in the psyche of the Jew.

The invasion on Iraq was instigated by U.S. defence under-secretary Wolfowitz, a Zionist Jew. Weapons of mass destruction were merely the excuse prepared for gullible Americans. The real reason was Saddam's active support for attacks on Israel. It would have been nicer if the motivation was to liberate the Iraqi people from a vile tyrant, which sends a much healthier signal for oppressor and oppressed alike.

There have been many cases of Jews in important positions manipulating policies to Israel's favour. The US pays Israel over 3 billion dollars per year, which is more than it pays the whole of Africa, except Egypt which receives it only for making peace with Israel. The Israelis are acting exactly like Pharaoh in oppressing Palestinians.

28:02 Now Pharaoh made himself a tyrant in the land. He divided his people into castes, one group of which he persecuted, putting their sons to death and sparing their daughters. Truly, he was an evildoer. But it was Our will to Favour those who

were oppressed and to make them leaders of mankind, to bestow on them a noble heritage and to give them power in the land; and to inflict on Pharaoh, Haman, and their army, the very scourge dreaded by their victims.

By the standards of the day, and from a purely secular view, Pharaoh's policy made sense. Acquiescing to Moses would reduce his power by decreasing the number of subjects and set a bad precedent. Today governments severely resist any form of devolution, separation or fragmentation. To preserve the unity of the state, he decided on a system of killing the males and integrating the women into society; the next generation would be mixed, half Egyptian, and in a generation or two they would disappear as a separate race, homogenised with the majority. The only problem was that such solutions are OK in the animal kingdom, where it happens every day, but not for humans where it is morally evil. But he did not see it that way, considering himself a god and supreme arbiter of morals.

26:18 Pharaoh said to Moses: "Did we not bring you up when you were an infant? And have you not spent several years of your life amongst us? Yet you have done what you have done; surely you are ungrateful."

Here was a voice of moderation. He could have added that Moses was clothed, fed and educated in his palace in supreme luxury and privilege, and to show his gratitude he had murdered an Egyptian. If such a case were presented in a law court today, the judge would find it difficult to find Pharaoh guilty. On one hand is a great ruler trying to maintain peace and stability in his kingdom, on the other an escaped murderer returning from abroad to foment rebellion and disunity. Law courts are concerned with the rule of law for the benefit of society, but God's laws are concerned with the struggle between good and evil for the benefit of the soul of the individual.

43:52 Pharaoh made a proclamation among his people. He said: "My people, is the kingdom of Egypt not mine, and are these rivers that flow at my feet not mine also? Can you not see? Am I not mightier than this despicable wretch, who can scarcely make his meaning plain? Why have no bracelets of gold been given him, or angels sent down with him?"

His logic was: I am much more powerful and richer than this stuttering wretch, thus how can he dare to question the morality of my decisions? A similar arrogance exists in Israeli today.

42:26 Pharaoh said: "I will kill Moses, then let him invoke his god! I fear that he will change your religion and spread disorder in the land.

Again, this is a reasonable line of reasoning, practiced widely in the modern era. No fuss is made if a ruler were to bump off the occasional trouble monger if there is a genuine fear that he will cause disorder, strife and instability. Even Amnesty International would not publicly object if there were only one or two victims. Only when political assassinations number hundreds or thousands does an international outcry begin.

ĕ

7:138 We led the Israelites across the sea, and they came upon a people zealously devoted to idols which they had. They said to Moses: "Make us a god like their gods." Moses replied: "You are indeed an ignorant people. The religion which these idolaters follow is doomed and all their works are in vain."

Did the Israelites deserve salvation, resorting to idolatry at the first opportunity, and repeatedly relapsing back to it? The more signs a people is shown, the more is expected of it, and the greater the punishment for transgression.

44:33 We saved the Israelites from a degrading scourge, from Pharaoh, who was a tyrant and transgressor and exalted them advisedly above the nations.

45:16 We gave the Scriptures to the Israelites and bestowed on them wisdom and prophethood. We provided them with good things and exalted them above the nations.

After delivery from Egypt, they were endowed with power and affluence. They repeatedly broke their covenant and suffered repeated defeats and misfortunes.

2:134 That nation has passed away. Theirs is what they did, and yours what you have done. You shall not be questioned about their actions.

Despite explicit references in the Bible, the Christians believe in the Primal Sin and that we must be punished for the sins of our ancestors, and the Jews persist in believing that they are blessed as a race, but how do they reconcile their disastrous misfortunes?

62:06 Say to the Jews: "If your claim be true that of all men you alone are God's friends, then you should wish for death!"

A prominent Jewish film director said he doesn't want to be immortal through his art, but wants to be immortal, as in living for ever.

02:94 Say: "If God's Everlasting Mansions are for you alone, to the exclusion of all others, then you must long for death if your claim be true!" But they will never long for death, because of what they did; for God knows the evildoers. Indeed you will find that they love this life more than other men; more than the pagans do. Each one of them would willingly live a thousand years. But even if their lives were indeed prolonged, that will surely not save them from Our scourge.

Secular Jews and their secular state will inevitable meet their just end.

APPENDIX 1 FURTHER ON THE INTERPRETATION OF DREAMS

The brain receives and processes analogue data but computers process binary data because its hardware, based on the transistor, can only recognize two states, on or off. The brain is immensely more complicated than computers; an axon can branch out extensively and form many distinct synapses. Input data actually changes the physical structure of the brain; the software changes the hardware, very unlike computers.

Crick's theory on dreams, despite his Nobel Laureate eminence, has not found wide acceptance among scientists. Different theories are still proposed in its place, though none as viable. The main problem with Crick's theory is its inability to explain weird dreams, where scenes and events not previously experienced or thought about before appear, incompatible with the mechanism Crick uses to explain dreams. He calls these "bizarre intrusions" and attributes them to the ability or tendency of the brain to fantasize. There is a notable lack of evidence for any mechanism to explain this phenomenon.

Crick's postulate for conventional dreams is that we store data on "neural nets" or networks of neurons, each of about 30 neurons, which become overloaded when data exceeds an optimum amount. As data is in the form of stored associations, i.e. of similar firing patterns, exceeding that amount may induce confusion in data storage, or bring the brain closer to such an undesirable stage. Thus during REM sleep, when there is no data input or output, the neural nets are retuned for better segregation of data, based on the strengths of the synapses. He calls this the "reverse learning process." Notably, the strengths of the synapses are determined by the strength of the emotion associated with them.

According to Crick, during REM sleep the brain readjusts the strengths of the synapses, enhancing the separation of the various inputs stored on the neural nets, i.e. allowing better separation of the associated memories stored on them. This allows greater efficiency and brain capacity. It also explains why those few animals that do not exhibit REM sleep have large brains; they don't need to be so

efficient. Examples are dolphins and whales, who are not burdened with large brains on narrow necks, as most REM animals are. They can afford to be less efficient with their brain, thus not require REM sleep.

(It is intriguing that theoretically each neural net of say 30 neurons has 900 synapses and can have almost infinite different firing states.)

Crick says the reverse learning process involves feeding the neural net with random input, then after it has given a response, the synapses between the input and output are adjusted. This is repeated many times. At each stage the background "noise" interfering with the neural net is squelched to minimal levels.

Evidence for this is based on the waves observed from brain scanning during REM, which originate in the pons and spread via the thalamus to the neo-cortex. He summarises the process by saying, "We dream to reduce fantasy", or "We dream to reduce obsession."

Another major shortcoming of his theory, in addition to its inability to explain bizarre dreams, is that it does not consider the separation of data from their associated emotions. A mechanism that allows for this is presented here.

The brain appears to have little capacity to store raw data unless associated with an emotional component conferred on it. For brevity, let's call these "emotives", which are the emotional attachments given to data to give them greater longevity in the memory store of the brain.

We can remember hours of events and stories, or reams of verse by heart yet find it difficult to remember a mere twelve-digit number for a brief period, even though it occupies a miniscule fraction of memory space. It's also why we can easily memorize many hours of music in detail, but very little if the same music were presented as a series of notes. The reason is that we find it hard to bestow emotions on individual notes, but much easier to consecutive notes, or tunes. Similarly for letters; we can remember much better if they are connected into words, sentences, prose, or verse, to which it is much easier to apply emotives. We can remember a great number of words that convey emotion, but much less if the same words are presented as letters, where emotives can't be conferred. NB Both contain the same amount of data; for computers both are the same.

Memorising data is easy when interesting lyrics are set to nice music; one can easily remember these even after decades, as if etched in the mind, whereas the same amount of data, as separate notes or letters, is hard to remember for seconds. It is remarkable that the amount of data for both is exactly the same.

Beethoven had an exceptional ability to associate notes with colour, which was his way to attach emotives to notes, thus negating the immense handicap of deafness. It allowed him to memorise a vast amount of music without listening to them.

This may also explain why the clinically depressed have reduced memory. Emotional exhaustion and indifference is not a conducive state to allocate emotions. It also explains why those in love remember minutiae concerning their object of desire, (used by women as a test for true love). It is also why businessmen under stress have good job memory. They use their abundant positive stress to bestow emotives on details, yet can barely remember important data about home and family, such as birthdays, anniversaries etc., unrelated to stress.

To remember data without emotives requires hard repetition to hammer it in, but even that dissipates quickly. If the same information were attached to emotives, it would be quicker and easier to memorize and slower to forget. Practical use of this can be seen in the extraordinary success of the TV program "Sesame Street", based on a formula of 98% entertainment and 2% education; the two percent educational data is lavished with emotives and thus is well absorbed. Imagine the difference for a child confronted with data in plain text without pictures, or the same data presented by Kermit the Frog or the Cookie Monster in an amusing sketch. The actual volume of data entering the brain from a plain text page is a few kilobytes, but the same data from Kermit is about fifty megabytes, yet the latter is much easier to remember.

The essential role of emotives reveals another fundamental difference between the mechanism of the brain and computers.

Children have more intense emotions than adults and allocate more intense emotives to data and events (which is why they are easier to teach than adults). Sometimes trivial information is given such a strong emotive at childhood that it is easily remembered after decades. With increasing age, weaker emotives are attached to events. An old man might easily recall scenes from youth and the exact words of his schoolmistress seventy years before, yet unable to recall what he had for lunch.

Emotives play a crucial role for data storage; the stronger the emotive, the better the memory. However emotives too occupy memory space, thus are subject to the same data filtering mechanism proposed by Crick. When emotives are considered redundant or unused, these too are sent to the recycle bin for ultimate disposal through dreams.

One can only speculate whether emotives are stored on the same neural nets or separately, but we can be fairly sure that the brain gives them greater prominence than dry emotionless data, which is why we find it much easier to remember emotions than dry data.

Emotives also are data and subject to similar processing. They are sent out together with their associated data during REM dreaming. Dreams usually are composed of experienced events together with their associated emotives. Such dreams appear as realistic, coherent, meaningful, and recognisable.

The reason bizarre dreams occur is proposed below. Emotives are better retained in the brain than dry data. How do we know? Because we often forget data, yet clearly remember the emotion associated with them. This association is a mechanism we subconsciously use to recall data; recalling the emotion associated with the event, then the data that fits the emotive. It is very unusual to recall data without remembering its emotives. For instance we often forget a person's name or event but remember how we feel about the person/event. Rarely do we recall a name and forget what the associated emotions for the person were.

When the importance or relevance of emotives decline below a critical level, these too like other data are sent to the bin via REM sleep. Since dry data is held in memory more weakly than emotives, they are more prone to degradation, (especially if stored at a physically separate location). In such cases, disposable emotives are sent to the dream processing stage separately without their associated dry data.

We may reasonably assume that the brain cannot, is not accustomed to, or prefers not to process pure emotives alone. Otherwise while we are awake we could process pure emotions without accompanying data, but this is difficult and unnatural. The degree of difficulty may be gauged by attempting to do so. The closest state is perhaps while listening to instrumental music. Though music itself is composed of data, often we forget the data as soon as it enters. It is difficult to remember the extended notes or strains of moody music, but much easier to recall the feelings induced. Thus listening to such music resembles processing of emotions without accompanying data.

A similar process presumably is induced by narcotics, where emotions are produced first and then data is recalled or fabricated to suit. Analogous to bizarre dreams, hallucination involves plenty of emotions with little associated data, so surrogate data is added.

During REM sleep, emotives are sent to the recycle bin, when their synapse strength has reduced below a critical level, but since they are without their associated dry data, the brain accommodates by supplying suitable data to fit the emotives, to facilitate the process. It can do this by recalling dry data of similar emotive equivalence, or it may synthesise events from assorted data in the memory store. For some reason, the brain doesn't like to process emotives alone. While awake, the brain is not used to processing emotives alone. We would feel strange if assorted emotions came over us for no reason at all, i.e. devoid of data.

A further refinement of this (the brain works in mysterious ways), involves incidents in which events occur that are so unpleasant that the brain actively attempts to eliminate the painful memory in a process which the conscious individual is unaware of. In addition to the normal degradation of data that occurs, there is now evidence that the brain deliberately sets about eliminating some memory using specially manufactured enzymes. Though actual data of the traumatic event may be actively relegated, hidden, or destroyed, part or all of its

powerful emotives may remain. After a suitable lapse of time, when these emotives are deemed no longer of any use, (remember they have been disembodied from the data) they are sent to the REM processing stage. Since the corresponding data has been lost, the event must be allocated another suitable story line, (though not the original as it is too distressing), to accompany the emotives out of the system. Such accompanying data may be coherent, producing strange dreams, or a hotchpotch of data stuck together, synthesised or off the shelf, producing bizarre dreams. Most bizarre dreams occur as a result of normal degradation of dry data, though some may be produced in suppressing traumatic or unpleasant events.

This may explain the mechanism Freud alluded to, regarding suppressed dreams of traumatic events. He proposed that these were related to sexual matters during childhood. He may have based his ideas on personal experience, but there is no scientific evidence for it. His theories are now generally regarded defunct, only of historical value. Interestingly sexual matters usually have strong emotive components, and emotives are at their most intense during childhood.

There is of course the case, where emotives themselves become fragmentised, which will result in dreams that are even more bizarre.

The beauty of this theory of dream mechanism is that its verity can be tested by the individual, unlike laws of physics which must be accepted on trust from scientists. Dreams, including the enigmatic bizarre types, can easily be evaluated by the individual based on this theory.

Firstly one should remember data and emotives that are about to be disposed into the rubbish dump are not designed to be coherent or make sense. That may be one reason why it is processed while we are in an unconscious non-rational state. The data is not supposed to be remembered. If we do not recall dreams soon after waking up, we are unlikely ever to recall them later.

Secondly, the brain is not a perfect data sorting and processing machine. It's good at remembering emotives, but not dry data, i.e. without associated emotions. Being weakly held, they survive briefly in short term memory, and fare even worse elsewhere.

Thirdly, it's understandable that the brain doesn't make a lot of effort to keep the relegated data department or the waste bin neat and orderly (who does?).

Fourthly, though computers have a much simpler mechanism, they too have glitches, hanging or crashing, despite great efforts to prevent these. They do this while still in a good physical state.

The probability of this postulate being correct would increase appreciably if it correlates with experimental data, such as compatibility with emitted waves during REM, spreading from the pons to the neo-cortex. Crick says these pulses are random inputs sent to the neural nets for adjustment of synapse strengths for their better segregation, but they might just as well be sent for synapse strength reduction, in agreement with the theory of relegation of data.

Bizarre dreams appear to contradict Crick's theory, but according to the above proposed modification, they are totally compatible. Though based on anecdotal evidence, the theory correlates significantly with observations.

In summary: to enable data to enter long-term memory, the brain attaches emotives to it. When dry data and emotives are deemed no longer interesting or necessary, they are sent subconsciously for disposal or relegation via dreaming, which is a processing mechanism to dispose of dry data and emotives. The mechanism is similar to data processing awake, but acts in reverse direction. If the data and its original emotives go out together, dreams are realistic and coherent, similar to actual experienced events. Emotives are easy to remember. They are the very mechanism used by the brain to enhance memory, without which dry data can barely be stored. There is much less variety of emotions than dry data, thus generally reach the dream stage in better shape than dry data, whose collection and maintenance is more difficult. Dry data is easier to forget, can fragmentize, or deteriorate during storage, especially if stored in a physically separate area. In this case the brain may supply an assortment of other fragmentised and dislocated data for the benefit of pairing with emotives to be processed through the dream stage. Such dreams, if remembered, will appear nonsensical, mystical, weird, or bizarre.

It is noteworthy that fragmentised or synthesised dry data, summoned to accompany emotives on their way out, are the closest dry data that the brain can muster which best fits the emotives, or is somehow related to them. A question that arises is which part of the brain supervises these allocations? One way to find out is to observe which area of the brain is most active during REM sleep, determine the nature of its activity, and the direction of the waves.

Why does the brain recollect or synthesise fragmentised data of similar emotive content to escort emotives during dreaming? Because emotives cannot be processed, or deleted, without dry data attached. It is difficult to dream of emotions alone without accompanying data. Nor do emotions appear alone when awake; they always accompany data.

The brain shows remarkable dexterity in recalling assorted data to suit emotives sent out for disposal. Either it recalls actual past real events and their accompanying emotions together, or failing this, it makes a montage of these from diverse fragmentised sources, which nevertheless fit with the relevant emotives.

Where distressful or traumatic events have induced a subconscious state of denial, (to minimise pain), the brain synthesises suitable data or marshals a train of fragmented events or scenes, drawing from its rich base of experiences and observations. For example if a humiliating event has been actively or gradually expunged and the remaining emotive is sent out for disposal in a dream, the accompanying data will be suitably synthesised, compatible with the emotion of humiliation, not from visions of cuddly kittens for example.

The stronger emotives of children can explain why they have more nightmares than adults. NB: According to this theory, those that have bad dreams or nightmares are in a healthier situation than those with pleasant dreams, because both are moving away from their dream circumstances.

Each individual has abundant opportunity to check the verity of this postulate by recalling the *emotive* component of bizarre dreams, not the actual events. One can then readily check to see if these correspond with actual emotions experienced, which in the meantime have been relegated, unconsciously or not, to less important or disposable status due to changes in circumstances. For example, news of serious illness of an aged acquaintance may conjure the scenario of the person's death. If it transpires that the relative has fully recovered and is in perfect health after all, the extraneous information concerning death together with its associated emotions are relegated for disposal. The relevant emotive reaches its turn for disposal, a dream with the same emotives is formed, but instead of the forgotten acquaintance, another character in a different scenario is processed, yielding a bizarre dream.

Much of Freud's theories on dreams were pure conjecture, whereas this postulate can easily be checked by any individual by recalling dreams and evaluating them as described above. NB. Dreams are not supposed to be remembered.

APPENDIX 2 MORE ON THE SPEED OF LIGHT

A strange assumption on which astrophysics is based is that the speed of light has remained the same from the instant of creation till now. Some physicists at Cambridge have recently speculated the speed of light is slowing down. There is merit to the speculation that its speed may be increasing instead. Not taking this into consideration (the lower speed in the past) may be the root of discrepancies in astronomy, such as in the estimation of the age of the universe, based on Hubble's constant, which is based on the assumption that the speed of light has always been constant from time zero.

According to this original postulate, a considerable part of the observed red shift may be due not to the movement of the stars away from us, but to the intrinsic increase of the speed of light with time, caused by the change in the rate of the flow of time, which even in a fixed, non-expanding universe, could account for the red shift of the stars. This possibility is not considered in physics or astronomy.

An analogy is a sound source in a closed air-tight chamber, whose air is being extracted. As the air pressure decreases, the speed of sound inside the chamber increases, and the Doppler Effect will be heard, even though the distance from the source to the listener is constant. (The Doppler Effect is the change in frequency heard when a sound source is moving towards or away from the listener).

Since spatial dimensions of space have increased from its tiny size at the big bang to its present vastness, there is no reason to suppose that the rate of flow of time and the speed of light, which are inseparably entwined, should have remained constant and fixed from time zero to the present.

An alternative hypothesis is that space is not expanding, or at least not as less rapidly than presently considered; instead of the increase in spatial dimensions, it may be time itself that is speeding up, causing the speed of light to increase correspondingly, accounting for part or all of stellar red shifts. This should at least be considered a possibility until disproved.

Science is good at disproving postulates and theories. It's very good in predicting behaviour within limits, but is inherently weak in absolutes. Universal constants considered absolute today may be continuously changing, such as the speed of light.

Postulates gain credibility if they can explain phenomena, clarify discrepancies, or best of all make correct predictions. An example is Mendeleev's periodic table of the elements. At the time the number of elements discovered was much less than today. Though the initial list had many discrepancies, such as the many transition elements not fitting the pattern, as soon as its ability to predict the existence of elements and their properties were verified, it gained widespread acceptance.

Thus authors of postulates are allowed more latitude than others, the scientific equivalent of a poet's license. They can use more than the usual strictly controlled amount of intuition allowed in scientific methodology, to encourage imagination and incisive perception, rather than inhibiting them on the safe side. Bounds of rationality cannot be exceeded. The responsibility is on peers to determine its merit.

Huygens was a great scientist of the 18th century, a great mathematician, astronomer, physicist, and pioneer in dynamics and optics. He was the first (in the West) to discover the wave nature of light, developed the first pendulum clock and the spring-loaded portable watch, but he also deduced there must be a lot of hemp on Jupiter, because Jupiter has four moons (which he also discovered); clearly moons are for navigation, navigation means ships, ships have sails, sails require rope, and finally rope requires hemp.

Thus there must be lots of hemp on Jupiter.

APPENDIX 3 DID HITLER WANT WAR?

("Churchill, Hitler and 'The Unnecessary War'" by Pat Buchanan, and Creators Syndicate.)

On Sept. 1, 1939, 70 years ago the German Army crossed the Polish frontier. On Sept. 3, Britain declared war. Six years later, 50 million Christians and Jews had perished. Britain was broken and bankrupt, Germany a smoldering ruin. Europe had served as the site of the most murderous combat known to man, and civilians had suffered worse horrors than the soldiers.

By May 1945, the Red Army occupied all the great capitals of Central Europe: Vienna, Prague, Budapest, Berlin. A hundred million were under the heel of the Bolshevik regime. What cause could justify such sacrifices?

The German-Polish war had come out of a quarrel over a town the size of Ocean City, Md., in summer. Danzig, 95 percent German, had been severed from Germany at Versailles in violation of Woodrow Wilson's principle of self-determination. Even British leaders thought Danzig should be returned.

Why did Warsaw not negotiate with Berlin, which was hinting at an offer of compensatory territory in Slovakia? Because the Poles had a war guarantee from Britain that, should Germany attack, Britain and her empire would come to Poland's rescue.

But why would Britain hand an unsolicited war guarantee to a junta of Polish colonels, giving them the power to drag Britain into a second war with the most powerful nation in Europe? Was Danzig worth a war? Unlike the 7 million reticent people of Hong Kong whom the British delivered to Beijing, the people of Danzig were clamouring to return to Germany.

The war guarantee was not about Danzig, or even about Poland. It was about the moral and strategic imperative "to stop Hitler" after he tore up the Munich pact and humiliated Britain.

But where is the evidence that Adolf Hitler, whose victims as of March 1939 were a fraction of Gen. Pinochet's, or Fidel Castro's, was out to conquer the world? After Munich in 1938, Czechoslovakia did crumble yet the Sudeten Germans were returned to German rule, as they wished. Poland had annexed the tiny disputed region of Teschen, where thousands of Poles lived. Hungary's

ancestral lands in the south of Slovakia had been returned to her. The Slovaks had their full independence guaranteed by Germany. As for the Czechs, they came to Berlin for the same deal as the Slovaks, but Hitler insisted they accept a protectorate. Now one may despise what was done, but how did this partition of Czechoslovakia manifest a drive for world conquest?

A common reply has been that if Britain had not given the war guarantee and gone to war, after Poland would have come Russia's, then France's, then Britain's, then the United States turn, and all would be speaking German now.

But if Hitler was out to conquer the world — Britain, Africa, the Middle East, the United States, Canada, South America, India, Asia, Australia — why did he spend three years building that hugely expensive Siegfried Line to protect Germany from France? Why did he start the war with no surface fleet, no troop transports and only 29 oceangoing submarines? How do you conquer the world with a navy that can't get out of the Baltic Sea? If Hitler wanted the world, why did he not build strategic bombers, instead of two-engine Dorniers and Heinkels that could not even reach Britain from Germany?

Why did he let the British army go at Dunkirk? Why did he offer the British peace, twice, after Poland fell, and again after France fell?

Why, when Paris fell, did Hitler not demand the French fleet, as the Allies demanded and got the Kaiser's fleet? Why did he not demand bases in French-controlled Syria to attack Suez? Why did he beg Benito Mussolini not to attack Greece?

Because Hitler wanted to end the war in 1940, almost two years before the trains began to roll to the camps. Hitler had never wanted war with Poland, but an alliance with Poland such as he had with Francisco Franco's Spain, Mussolini's Italy, Miklos Horthy's Hungary and Father Jozef Tiso's Slovakia.

Indeed, why would he want war when, in 1939, he was surrounded by allied, friendly or neutral neighbors, save France? And he had written off Alsace, because reconquering Alsace meant war with France, and that meant war with Britain, whose empire he admired and whom he had always sought as an ally.

As of March 1939, Hitler did not even have a border with Russia. How then could he invade Russia? Winston Churchill was right when he called it "The Unnecessary War" — the war that may yet prove the mortal blow to Western civilization.

Hitchens on WW2

Had Hitler wanted to force us into a deal after Dunkirk (which I don't believe he did), he could have massed his forces in France rather than on the Soviet border in the spring of 1941, and launched an invasion of this country. I think, given our state at the time, that we would have been at least in serious danger of being overwhelmed. Nothing in Hitler's behaviour in June 1940, after we had been

driven off the continent, suggests that he was particularly interested in doing any such thing. We were left in a sort of belligerent limbo in 1940, from which we were eventually rescued by the USSR and the USA, who then conducted the war according to their goals.

Let me make this point again. There is no evidence, in word or deed, that Hitler had any special interest in the British Empire, or in destroying it. Sad as it is to acknowledge, Britain did not figure greatly in his calculations or seem to be much of an obstacle to his plans. If we had 'given' him Poland (which we actually had no power either to give or withhold) as we had 'given' him the Rhineland, Austria and Czechoslovakia (which we also had no power to give or withhold) what was the 'more' he would have come back for? Would our willingness to let him seize chunks of Central Europe, where we had no interest or possessions, have somehow fuelled a German desire for Burma, Malaya or Nyasaland? Hitler wanted a German Land Empire stretching into the east, into Ukraine for the wheat, and the Caucasus for the oil - probably something like the territory seized by the Kaiser at the 1917 Brest-Litovsk Treaty. I don't follow the logic that leaving Hitler to fight his twin, Stalin, would have fuelled in him a desire to seize Delhi or Nairobi. The threat to the British Empire came from the USA, which wanted it broken up, and from Japan, which wanted to steal large chunks of it; though Japan was powerless as long as we and France were militarily strong in the Far East.

It is perfectly true that an Anglo-French stand against Hitler when he reoccupied the Rhineland in 1936 might have brought him down. But this is much more fantastical than my essay. By 1936, we had already trashed our good relations with Italy and nobody in democratic Europe, nobody - not even Churchill - actually favoured the military action which would have thrown the then-tiny German army back over the Rhine bridges.

After that, you have to ask, what exactly would Britain have done had we 'fought' over the takeover of Austria in 1937, another genuine turning point. With what army? With what air force? Come to that, how would we have saved Czechoslovakia? Look at a map. Central Europe is more interesting and complex than you think. Prague is not some remote Slavic outpost, but a long way west of Vienna. In September 1938, Prague was perhaps an hour's flight from the Luftwaffe airfields near Dresden. Bratislava, then the second city of Czechoslovakia, is practically in the suburbs of Vienna, where Hitler was free to station enormous forces. The territory of Hitler's Reich embraced the Czech lands from North, and Southern flanks. However gallantly the Czechs might have fought in their mini-Maginot line in the Sudetenland, what would have become of them, while we gallantly dropped propaganda leaflets on Mannheim and Stuttgart from our bi-planes, and the French polished their belt-buckles in the Maginot Line, as they did while Poland perished in September 1939? They'd have gone the way of the Poles. We didn't fight in 1937, 1938 and 1939 because we couldn't.

The silly part of Munich was not our realistic failure to stand up for people we couldn't actually help except with words, but our misleading and dishonourable pretence that we could help the Czechs, the pretence that we were their 'friends' at Munich and the pretence that the inevitable climbdown was 'Peace with Honour'.

It was this deluded, idealistic piffle that was exposed when Hitler grabbed Prague in March 1939, and we then gave our inexplicable - and wholly worthless - guarantee to Poland. What good did it do? It took away from us any freedom to decide when or whether to go to war. It didn't save an ounce of Polish sovereignty, or a square inch of Polish territory, let alone a single life or building. Having been useless and idealistic over Prague, we were then to be useless and militant over Warsaw. It has been said many times how much worse it was to be a 'saved' Pole than a 'betrayed' Czech. Who can deny it?

No, the question is not what sort of a deal we'd have had to make with Hitler. My reading of 1940 tells me how very, very close we came to making such a deal after Dunkirk left us bankrupt and without an army, a state we were in entirely thanks to the beliefs that 'something must be done to stop Hitler' and 'you have to stand up to bullies', neither backed by any considered thought. Well, if you do stand up to a bully, experience suggests that you knock him down with the first blow, or he'll still be a bully. You certainly don't let him knock you down.

My reading of 1945 tells me that we ended up making a shameful deal with Stalin, under pressure from Roosevelt to do so, giving the Soviet tyrant the very 'free hand' in central Europe that we had impotently sought to deny Hitler. The difference was that by then we had sacrificed huge numbers of lives, all our wealth and our Empire. For what? If we had stayed out of power struggles in which we had no power, there'd have been no need to make a deal with Hitler, or Stalin either.

The USA, which stayed out of the conflict until December 1941, acted much as Britain used to behave in European conflicts, supplying and paying others to fight on its behalf until it had to intervene directly. This sensible policy, which made us rich and powerful in the 18th Century, did the same for the USA in the 20th.

Had we stayed out, why would we have had to negotiate with him at all? He simply wasn't interested in us until we declared war on him.